

Jacquard Products Manufactured by Rupert, Gibbon & Spider, Inc. P.O. Box 425 | Healdsburg, CA 95448 800.442.0455 | Fax: 707.433.4906 www.jacquardproducts.com 27103-1329

Pearl Ex Powdered Pigment - 685 Spring Green - Pg I

Revision Date: 05/15/18

SECTION I - CHEMICAL, PRODUCT & COMPANY INFORMATION

Product Name:	PEARL EX POWDERED PIGMENT	
Product Number/Code:	685 SPRING GREEN	
Recommended Use:	Artist pigment	
Restrictions on use:	None known	
Manufacturer:	Rupert, Gibbon & Spider, Inc. I 147 Healdsburg Ave. Healdsburg, CA 95448 I -800-442-0455 / 707-433-9577	
Emergency Number:	ChemTel, Inc Contract #MIS9128344	
	North America: I-800-255-3924	International: I-8I3-248-0585

SECTION 2 - HAZARD(S) IDENTIFICATION

This product is not considered to be or contain hazardous chemicals based on evaluations made by our company under the OSHA Hazard Communication Standard, reference 29 CFR 1910.1200. **Toxicological Data on Ingredients:** Hazard Classification Not hazardous Physical Hazards: Not classified Health Hazards: Not classified Environmental Hazards: Not classified Label Elements Pictogram: None Signal Words: None Hazard Statements-EU: The mixture does not meet the criteria for classification. **Precautionary Statements-EU:** Prevention: P260 Do not breathe dust. Provide adequate information, instruction and training for operators. Response: See sections 4, 5 & 6 Storage: See section 7 See section 13 Disposal: Hazard(s) not otherwise classified: None known

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SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Chemical nature:	Mica coated with: titanium oxide, chromium(I	Mica coated with: titanium oxide, chromium(III) oxide	
Chemical identity	Content in percent (%)* CAS #		
Mica (muscovite)	>= 30% - < 50%	12001-26-2	
Titanium (IV) oxide	>= 50% - < 70%	13463-67-7	
Chromium (III) oxide	>= 10% - < 30%	1308-38-9	
Exact percentages withheld as a t	rada aarrat	1	

Exact percentages withheld as a trade secret.

SECTION 4 - FIRST AID MEASURES

Description of first aid measures:	
In the event of skin contact:	Take off immediately all contaminated clothing. Rinse skin with water/ shower.
In the event of eye contact:	Rinse out with plenty of water.
In the event of swallowing:	Make victim drink water (two glasses at most). Consult doctor if feeling unwell. Never give anything by mouth to an unconscious person.
In the event of exposure by inhalation:	Fresh air.
Most important symptoms and effects, acute and delayed:	We have no description of any toxic symptoms.
Indication of any immediate medical attention and special treatment needed:	No information available.

SECTION 5 - FIREFIGHTING MEASURES

Suitable extinguishing media:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media:	For this substance/mixture no limitations of extinguishing agents are given.
Special hazards arising from the substance or mixture:	Not combustible. Ambient fire may liberate hazardous vapors.
Advice for fire fighters:	In the event of fire, wear self-contained breathing apparatus.
Further information:	None

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:	Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert.
Methods and material for containment and clean up:	Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.
Environmental procedures:	No special precautionary measures necessary.
Reference to other sections:	Protective equipment: see section 8.

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SECTION 7 - HANDLING AND STORAGE

Precautions for safe handling:	Observe label precautions.
Conditions for safe storage including any	Tightly closed. Dry.
incompatibilities:	Storage temperature: no restrictions.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limit(s):			
Basis:	Value:	Threshold limits:	Remarks:
General threshold I	imit value for dust:		
ZIA	Time Weighted Average (TWA):	5 mg/m ³	Form of exposure: Respirable fraction.
	Time Weighted Average (TWA):	15 mg/m ³	Form of exposure:Total dust.
	Time Weighted Average (TWA):	50 millions of particles per cubic foot of air	Form of exposure:Total dust.
	Time Weighted Average (TWA):	15 millions of particles per cubic foot of air	Form of exposure: Respirable fraction.
	Time Weighted Average (TWA):	15 mg/m ³	Form of exposure:Total dust.
	Time Weighted Average (TWA):	5 mg/m ³	Form of exposure: Respirable fraction.
OSHA_TRANS	PEL:	5 mg/m ³	Form of exposure: Respirable fraction.
	PEL:	15 mg/m ³	Form of exposure:Total dust.
ACGIH	Time Weighted Average (TWA):	10 mg/m ³	Form of exposure: Inhalable particles.
	Time Weighted Average (TWA):	3 mg/m ³	Form of exposure: Respirable particles.
Titanium (IV) oxide	e 13463-67-7:		
ACGIH	Time Weighted Average (TWA):	10 mg/m ³	
OSHA_TRANS	PEL:	15 mg/m ³	Form of exposure:Total dust.
ZIA	Time Weighted Average (TWA):	10 mg/m ³	Form of exposure:Total dust.
Mica (muscovite)	2001-26-2:		
ACGIH	Time Weighted Average (TWA):	3 mg/m ³	Form of exposure: Respirable fraction.
NIOSH	Recommended Exposure Limit (REL):	3 mg/m ³	Form of exposure: Respirable.
ZIA	Time Weighted Average (TWA):	3 mg/m ³	Form of exposure: Respirable dust.
	Time Weighted Average (TWA):	20 millions of particles per cubic foot of air	

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SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Chromium (III) oxide	e 1308-38-9:			
NIOSH/GUIDE	Recommended Expos Limit (REL):	ure 0.5 mg/m ³	Expressed as: as Cr.	
OSHA_TRANS	PEL:	I mg/m ³	Expressed as: as Cr.	
	PEL:	0.5 mg/m ³	Expressed as: as Cr.	
ZIA	Time Weighted Averag (TWA):	ge I mg/m ³		
ACGIH	Time Weighted Averag (TWA):	ge 0.5 mg/m ³	Expressed as: as Cr.	
Control parameters:				
Appropriate engineering controls:		Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.		
Individual protection i	measures, such as personal	protective equipment:		
Hygiene measures:		Change contaminated clothing. Wash hands after working with substance.		
Eye/face protection:		Safety glasses		
Skin protection:		Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled. The chemical resistance of the protective equipment should be inquired at the respective supplier.		
Hand protection:		Not required.		
		Recommended Filter type: Filter P I (acc. to DIN 3181) for solid particle of inert substances. The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are performed according to the instructions of the producer. These measures have to be properly documented.		

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SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

General information:	
Appearance and physical state:	Powder
Color:	Green
Type of Odor:	Odorless
Odor threshold:	Not applicable
Important health, safety and environmental in	formation:
Initial Boiling Point and Boiling Range:	No information available.
Melting Point/Freezing Point:	No information available.
Flammability Classification:	The product is not flammable.
Flash Point:	Not applicable
Auto-ignition Temperature:	No information available.
Decomposition Temperature:	No information available.
Flammability Limits (lower/upper):	No information available.
Evaporation rate:	No information available.
Vapor Pressure:	No information available.
Vapor Density (Air=1):	3.0 - 3.2 g/cm³ at 68°F (20°C)
Particle size:	Particle size: 10.0 - 60.0 μm Mean particle size: 18.0 - 25.0 μm
Octanol/Water Partition Coefficient (log Pow):	No information available.
Specific Gravity:	No information available.
Bulk Density:	650 - 700 kg/m³
Water Solubility:	at 68°F (20°C) practically insoluble
pH:	3.0-6.0 at 100 g/l 68°F (20°C) (slurry)
Viscosity:	No information available.
Explosive Properties:	Not classified as explosive.
Oxidizing Properties:	None
Molecular Formula:	No information available.
Molecular Weight:	No information available.
Relative Density:	No information available

SECTION 10 - STABILITY AND REACTIVITY

Reactivity:	See below.
Stability:	The product is chemically stable under standard ambient conditions (room temperature).
Possibility of hazardous reactions:	No information available.
Conditions to avoid:	Not known to date.
Incompatible materials:	No information available.
Hazardous decomposition products:	No information available.

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SECTION II - TOXICOLOGICAL INFORMATION

Information on toxicological effects: Acute toxicity (list all possible routes of exposure)		
Acute Oral Toxicity:	Titanium (IV) oxide: LD50 Rat: . 10,000 mg/kg (external SDS) Mica (muscovite): no information available Chromium (III) oxide: LD50 Rat: > 5,000 mg/kg (IUCLID)	
Skin Corrosion/Irritation:	Titanium (IV) oxide: Rabbit - Result: No skin irritation (IUCLID) Mica (muscovite): no information available Chromium (III) oxide: Rabbit - Result: No irritation (IUCLID)	
Serious Eye Damage / Eye Irritation:	Titanium (IV) oxide: Rabbit - Result: No eye irritation (IUCLID) Mica (muscovite): no information available Chromium (III) oxide: Rabbit - Result: No eye irritation (IUCLID)	
Respiratory or Skin Sensitization:	Chromium (III) oxide: Humai	n experience - Result: Negative (Lit.)
Germ Cell Mutagenicity:	Chromium (III) oxide: Genot Mouse - Result: Negative (Lit	
Carcinogenicity:	IARC:	Group 2B: Possibly carcinogenic to humans Titanium (IV) oxide 13463-67-7
	OSHA:	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
	NTP:	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
	ACGIH:	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
Likely route of exposure:	Inhalation, eye contact, skin c	contact, ingestion
Target organs:	Respiratory system	
Specific Target Organ Toxicity - single exposure (STOT-se):	The substance or mixture is toxicant, single exposure.	not classified as specific target organ
Specific Target Organ Toxicity - repeated exposure (STOT-re):	The substance or mixture is not classified as specific target organ toxicant, repeated exposure.	
Aspiration Hazard:	Regarding the available data	the classification criteria are not classified.
Potential Health Effects:		
Additional Data:	no toxicologically relevant pr absorbed, no systemic effects dusts should be avoided as e functions. The individual test results we irritant effect; eye irritation t	ments using pigments of this type indicate roperties, since the substance is poorly s are to be anticipated. Inhalation of the ven inert dusts may impair respiratory orgar ere as follows: skin tolerance (rabbit): no est (rabbit): no irritant effect; LD50 (oral, mals still alive after 15,000 mg/kg. Subchroni fordings up to 20,000 mg/kg.

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SECTION 12 - ECOLOGICAL INFORMATION

Toxicity:	
Persistence and degradability:	No information available.
Bioaccumulative potential:	No information available.
Mobility in soil:	No information available.
Titanium (IV) oxide:	Toxicity to fish: LC0 Leuciscus idus (Golden orfe): >1,000 mg/l (external SDS) Toxicity to bacteria: EC0 Pseudomonas fluorescens: > 5,000 mg/l (external SDS)
Mica (muscovite):	No information available
Chromium (III) oxide:	Toxicity to fish: LC0 Leuciscus idus (Golden orfe): >= 1,000 mg/l; 48h (above the solubility limit in the test medium) (IUCLID) Toxicity to bacteria: EC0 E.coli: 1,000 mg/l (external SDS)
Biodegradability:	The methods for determining the biological degradability are not applicable to inorganic substances.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste treatment methods:	
Disposal:	The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

SECTION 14 - TRANSPORT INFORMATION

General Information:	The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DOT).	
UN number:	Not relevant	
UN proper shipping name:	Not relevant	
Transport hazard class:	Not relevant	
Packing group:	Not relevant	
Environmental Hazards:		
Environmentally hazardous substance: No		
Special precautions for user:	Not relevant	

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SECTION 15 - REGULATORY INFORMATION

Safety, health and environmental regulat	ions/legislation specific for the substance or mixture:	
US Regulations		
SARA 313:	The following components are subject to reporting levels established by SARA Title III, Section 313: Chromium (III) oxide (1308-28-9): 13%.	
SARA 302:	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.	
Clean Water Act:	This product does not contain any Hazardous Substances listed under the U.S. Clean Water Act, Section 311, Table 116.4A. This product does not contain any Hazardous Chemicals listed under the U.S. Clean Water Act, Section 311, Table 117.3.	
DEA List I:	Not listed	
DEA List II:	Not listed	
US State Regulations		
Massachusetts Right-to-Know:	Ingredients: Titanium (IV) oxide, Mica (muscovite), Chromium (III) oxide	
Pennsylvania Right-to-Know:	Ingredients: Titanium (IV) oxide, Mica (muscovite), Chromium (III) oxide	
New Jersey Right-to-Know:	Ingredients: Titanium (IV) oxide, Mica (muscovite), Chromium (III) oxide	
California Prop 65 Components:	Used as directed, this product will NOT expose you to chemicals known to cause cancer.	
	Reference to Titanium (IV) oxide is based on unbound respirable parti- cles and is not generally applicable to product as supplied. The Titanium (IV) oxide in Pearl Ex Powdered Pigments is bound to mica, and the particle size is too large to be considered respirable. <i>Ingredients</i> : Titanium (IV) oxide	
Notification status		
TSCA:	All components of the product are listed in the TSCA inventory.	
DSL:	All components of this product are on the Canadian DSL.	

SECTION 16 - OTHER INFORMATION

HMIS Hazard ID:	
Health: No information available	
Flammability:	No information available
Reactivity:	No information available
Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; *Chronic health effect	

Disclaimer:

The information contained in this SDS is based on data from sources considered to be reliable but Rupert, Gibbon & Spider, Inc. does not guarantee the accuracy or completeness thereof. Rupert, Gibbon & Spider, Inc. urges each customer or recipient of this SDS to study it carefully to become aware of and understand the hazards associated with this product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology or fire and understand the data in this SDS.

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Abbreviations:			
ACGIH	American Conference of Governmental Industrial Hygienists		
ADR	International carriage of Dangerous goods by Road		
AICS	Australian Inventory of Chemical Substances		
ATE	Acute Toxicity Estimate		
BfR	Bundesinstitut für Risikobewertung recommendations for food contact materials		
BCF	Bioconcentration Factor		
BOD5	5-day Biochemical Oxygen Demand		
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act		
CLP	Classification, Labeling and Packaging regulation		
COD	Chemical Oxygen Demand DOT Department of Transportation DSL Domestic Substances List		
EINECS	European Inventory of Existing Chemical Substances		
ECL	Existing Chemicals List (Korea)		
ENCS	Existing and New Chemical Substances Inventory (Japan)		
EN 689	Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy.		
ERG	Emergency Response Guide		
GHS	Globally Harmonized System		
HMIS	Hazardous Materials Information System IARC International Agency for Research on Cancer IATA International Air Transport Association		
ICAO	International Civil Aviation Organization IDLH Immediately Dangerous to Life and Health IMDG International Maritime Dangerous Goods		
LD50	Lethal Dose to 50% of test animal population		
MAK	Maximale Arbeitsplatz Konzentration		
NTP	National Toxicology Program		
OEL	Occupational Exposure Limit		
OSHA	Occupational Safety & Health Administration		
РВТ	Persistent, Bioaccumulative and Toxic vPvB Very Persistent and Very Bioaccumulative PEL Permissible exposure limit		
PICCS	Philippine Inventory of Commercial Chemical Substances		
PNEC	Predicted No Effect Concentration		
REACH	Registration, Evaluation and Authorization of Chemical Substances		
RID	International carriage of dangerous goods by Rail SARA Superfund Amendments and Reauthorization Act STEL Short Term Exposure Limit		
SVHC	Substance of Very High Concern		
TLV	Threshold Limit Value		
TSCA	Toxic Substances Control Act		
TWA	Time Weighted Average		
VOC	Volatile Organic Compound		
WGK	Wassergefahrdungsklasse (Water Hazard Class) WHMIS Workplace Hazardous Material Identification System		



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Pearl Ex Powdered Pigment - 691 Solar Gold - Pg I

Revision Date: 05/15/18

SECTION I - CHEMICAL, PRODUCT & COMPANY INFORMATION

Product Name:	PEARL EX POWDERED PIGMENT		
Product Number/Code:	691 SOLAR GOLD		
Recommended Use:	Artist pigment		
Restrictions on use:	None known		
Manufacturer:	Rupert, Gibbon & Spider, Inc. I 147 Healdsburg Ave. Healdsburg, CA 95448 I -800-442-0455 / 707-433-9577		
Emergency Number:	ChemTel, Inc Contract	#MIS9128344	
	North America: I-800-255-3924	International: I-8I3-248-0585	

SECTION 2 - HAZARD(S) IDENTIFICATION

This product is not considered to be or contain hazardous chemicals based on evaluations made by our company under the OSHA Hazard Communication Standard, reference 29 CFR 1910.1200. **Toxicological Data on Ingredients:** Hazard Classification Not hazardous Physical Hazards: Not classified Health Hazards: Not classified Environmental Hazards: Not classified Label Elements Pictogram: None Signal Words: None Hazard Statements-EU: The mixture does not meet the criteria for classification. **Precautionary Statements-EU:** Prevention: P260 Do not breathe dust. Provide adequate information, instruction and training for operators. Response: See sections 4, 5 & 6 Storage: See section 7 See section 13 Disposal: Hazard(s) not otherwise classified: None known

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SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS #
12001-26-2
12001 20 2
1317-80-2
7631-86-9
1309-37-1

Exact percentages withheld as a trade secret.

SECTION 4 - FIRST AID MEASURES

Description of first aid measures:	
In the event of skin contact:	Take off immediately all contaminated clothing. Rinse skin with water/ shower.
In the event of eye contact:	Rinse out with plenty of water.
In the event of swallowing:	Make victim drink water (two glasses at most). Consult doctor if feeling unwell. Never give anything by mouth to an unconscious person.
In the event of exposure by inhalation:	Fresh air.
Most important symptoms and effects, acute and delayed:	We have no description of any toxic symptoms.
Indication of any immediate medical attention and special treatment needed:	No information available.

SECTION 5 - FIREFIGHTING MEASURES

Suitable extinguishing media:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media:	For this substance/mixture no limitations of extinguishing agents are given.
Special hazards arising from the substance or mixture:	Not combustible. Ambient fire may liberate hazardous vapors.
Advice for fire fighters:	In the event of fire, wear self-contained breathing apparatus.
Further information:	None

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:	Advice for non-emergency personnel:Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert.
Methods and material for containment and clean up:	Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.
Environmental procedures:	No special precautionary measures necessary.
Reference to other sections:	Protective equipment: see section 8.

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SECTION 7 - HANDLING AND STORAGE

Precautions for safe handling:	Observe label precautions.
Conditions for safe storage including any	Tightly closed. Dry.
incompatibilities:	Storage temperature: no restrictions.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limit(s):			
Basis:	Value:	Threshold limits:	Remarks:
General threshold I	imit value for dust:		
ZIA	Time Weighted Average (TWA):	5 mg/m ³	Form of exposure: Respirable fraction.
	Time Weighted Average (TWA):	15 mg/m ³	Form of exposure:Total dust.
	Time Weighted Average (TWA):	50 millions of particles per cubic foot of air	Form of exposure:Total dust.
	Time Weighted Average (TWA):	15 millions of particles per cubic foot of air	Form of exposure: Respirable fraction.
	Time Weighted Average (TWA):	15 mg/m ³	Form of exposure:Total dust.
	Time Weighted Average (TWA):	5 mg/m ³	Form of exposure: Respirable fraction.
OSHA_TRANS	PEL:	5 mg/m ³	Form of exposure: Respirable fraction.
	PEL:	15 mg/m ³	Form of exposure:Total dust.
ACGIH	Time Weighted Average (TWA):	10 mg/m ³	Form of exposure: Inhalable particles.
	Time Weighted Average (TWA):	3 mg/m ³	Form of exposure: Respirable particles.
mica (muscovite)	2001-26-2:		
ACGIH	Time Weighted Average (TWA):	3 mg/m ³	Form of exposure: Respirable fraction.
NIOSH/GUIDE	Recommended Exposure Limit (REL):	3 mg/m ³	Form of exposure: Respirable.
ZIA	Time Weighted Average (TWA):	3 mg/m ³	Form of exposure: Respirable Dust.
	Time Weighted Average (TWA):	20 millions of particles per cubic foot of air	
silicon dioxide 763 l	-86-9:		
NIOSH/GUIDE:	Recommended Exposure Limit (REL):	6 mg/m ³	
ZIA:	Time Weighted Average (TWA):	6 mg/m ³	
	Time Weighted Average (TWA):	20 millions of particles per cubic foot of air	
	Time Weighted Average (TWA):	0.8 mg/m ³	The exposure limit is calculated from the equation, 80/(%SiO2), using a value of 100% SiO2. Lower values of % SiO2 will give higher exposure limits.

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SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Diiron trioxide 1309-	37-1:			
ACGIH:	Time Weighted Averag (TWA):	ge 5 mg/m ³	Form of exposure: Respirable fraction.	
NIOSH/GUIDE:	Recommended Expos Limit (REL):	ure 5 mg/m ³	Form of exposure: Dust and fume. Expressed as: as Fe	
OSHA_TRANS:	PEL:	10 mg/m ³	Form of exposure: Fume.	
ZIA:	Time Weighted Averag (TWA):	ge 10 mg/m ³	Form of exposure: Fume.	
Control parameters:				
Appropriate engineering controls:		Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.		
Individual protection r	measures, such as personal	protective equipment	t:	
Hygiene measures:		Change contaminated clothing. Wash hands after working with substance.		
Eye/face protection:		Safety glasses		
Skin protection:		Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled.The chemical resistance of the protective equipment should be inquired at the respective supplier.		
Hand protection:		Chemical-resistant, impervious gloves complying with an approved stan- dard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.		
Respiratory protection:		Required when dusts are generated. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assess- ment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.		

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SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

General information:		
Appearance and physical state:	Powder	
Color:	Gold	
Type of Odor:	Odorless	
Odor threshold:	Not applicable	
Important health, safety and environmental information:		
Initial Boiling Point and Boiling Range:	No information available.	
Melting Point/Freezing Point:	No information available.	
Flammability Classification:	No information available.	
Flash Point:	Not applicable	
Auto-ignition Temperature:	No information available.	
Decomposition Temperature:	No information available.	
Flammability Limits (lower/upper):	No information available.	
Evaporation rate:	No information available.	
Vapor Pressure:	No information available.	
Vapor Density (Air=1):	2.8 - 3.0 g/cm³ at 68°F (20°C)	
Particle size:	10 - 60 μm	
Octanol/Water Partition Coefficient (log Pow):	No information available.	
Specific Gravity:	No information available.	
Bulk Density:	280 - 320 kg/m³	
Water Solubility:	at 68°F (20°C) practically insoluble	
pH:	4-9 at 100 g/l 68°F (20°C) (slurry)	
Viscosity:	No information available.	
Explosive Properties:	Not classified as explosive.	
Oxidizing Properties:	None	
Molecular Formula:	No information available.	
Molecular Weight:	No information available.	
Relative Density:	No information available	

SECTION 10 - STABILITY AND REACTIVITY

Reactivity:	See below.		
Stability:	The product is chemically stable under standard ambient conditions (room temperature).		
Possibility of hazardous reactions:	No information available.		
Conditions to avoid:	No information available.		
Incompatible materials:	No information available.		
Hazardous decomposition products:	No information available.		

Pearl Ex Powdered Pigment - 691 Solar Gold - Pg 6

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SECTION II - TOXICOLOGICAL INFORMATION

Acute toxicity (list all possible routes of exposure)		
Acute Dermal Toxicity:	silicon dioxide: Rabbit: > 5,000 mg/kg (IUCLID)	
Skin Corrosion/Irritation:	silicon dioxide: Rabbit - Result: No irritation (OECD Test Guideline 404)	
Serious Eye Damage / Eye Irritation:	silicon dioxide: Rabbit - Result: No eye irritation (OECD Test Guideline 405)	
Respiratory or Skin Sensitization:	silicon dioxide: Guinea Pig - Result: Negative (IUCLID)	
Germ Cell Mutagenicity:	silicon dioxide: Genotoxicity in vitro - Ames test Salmonella typhimurium - Result: Negative (IUCLID) Mutagenicity (mammal cell test): chromosome aberration Result: Negative (IUCLID) Diiron trioxide: Germ cell mutagenicity - genotoxicity in vitro Ames test - Result: Negative (Lit.)	
Carcinogenicity:	IARC:	Group 2B: Possibly carcinogenic to humans rutile: 1317-80-2
	OSHA:	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
	NTP:	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
	ACGIH:	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
Likely route of exposure:	Inhalation, eye contact, skin	contact, ingestion
Target organs:	Respiratory system, eyes, skin	
Specific Target Organ Toxicity - single exposure (STOT-se):	The substance or mixture is not classified as specific target organ toxicant, single exposure.	
Specific Target Organ Toxicity - repeated exposure (STOT-re):	The substance or mixture is not classified as specific target organ toxicant, repeated exposure.	
Aspiration Hazard:	Regarding the available data the classification criteria are not classified.	
Potential Health Effects:		
Additional Data:	product is handled appropr ed as even inert dusts may	ot be excluded but are unlikely when the iately. Inhalation of the dusts should be avoid impair respiratory organ functions. Handle ir strial hygiene and safety practice.

Item Numbers: 27103-1329

Pearl Ex Powdered Pigment - 691 Solar Gold - Pg 7

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SECTION 12 - ECOLOGICAL INFORMATION

Toxicity:		
Ecotoxicity:	No information available.	
Persistence and degradability:	No information available.	
Bioaccumulative potential:	No information available.	
Mobility in soil:	No information available.	
Additional ecological information:No ecological problems are to be expected when the and used with due care and attention.		
mica (muscovite):	No information available	
rutile:	No information available	
silicon dioxide:	Toxicity to daphnia and other aquatic invertebrates EC0 Daphnia magna (Water flea): >= 10,000 mg/l; 24h OECD Test Guideline 202	
	Toxicity to algae IC50 Pseudokirchneriella subcapitata (green algae): 440 mg/l; 72h (IUCLID) NOEC Pseudokirchneriella subcapitata (green algae): 60 mg/l; 72h (IUCLID)	
Diiron trioxide: No information available		

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste treatment methods:	
Disposal:	The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

SECTION 14 - TRANSPORT INFORMATION

General Information:	The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DOT).		
UN number:	Not relevant		
UN proper shipping name:	Not relevant		
Transport hazard class:	Not relevant		
Packing group:	Not relevant		
Environmental Hazards:			
Environmentally hazardous substance:	No		
Special precautions for user:	Not relevant		

Pearl Ex Powdered Pigment - 691 Solar Gold - Pg 8

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SECTION 15 - REGULATORY INFORMATION

Safety, health and environmental regulat	ions/legislation specific for the substance or mixture:		
US Regulations			
SARA 313:	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.		
SARA 302:	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.		
Clean Water Act:	This product does not contain any Hazardous Substances listed under the U.S. Clean Water Act, Section 311, Table 116.4A. This product does not contain any Hazardous Chemicals listed under the U.S. Clean Water Act, Section 311, Table 117.3.		
DEA List I:	Not listed		
DEA List II:	Not listed		
US State Regulations			
Massachusetts Right-to-Know:	Ingredients: mica (muscovite), silicon dioxide, Diiron trioxide		
Pennsylvania Right-to-Know:	Ingredients: mica (muscovite), rutile, silicon dioxide, Diiron trioxide		
New Jersey Right-to-Know:	Ingredients: mica (muscovite), silicon dioxide, Diiron trioxide		
California Prop 65 Components:	Used as directed, this product will NOT expose you to chemicals known to cause cancer.		
	Reference to rutile is based on unbound respirable particles and is not generally applicable to product as supplied. The rutile in Pearl Ex Pow- dered Pigments is bound to mica, and the particle size is too large to be considered respirable. <i>Ingredients:</i> rutile		
Notification status			
TSCA:	All components of the product are listed in the TSCA inventory.		
DSL:	All components of this product are on the Canadian DSL.		
Korea:	rea: Not in compliance with the inventory.		

SECTION 16 - OTHER INFORMATION

HMIS Hazard ID:		
Health:	No information available	
Flammability:	No information available	
Reactivity:	No information available	
Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; *Chronic health effect		

Disclaimer:

The information contained in this SDS is based on data from sources considered to be reliable but Rupert, Gibbon & Spider, Inc. does not guarantee the accuracy or completeness thereof. Rupert, Gibbon & Spider, Inc. urges each customer or recipient of this SDS to study it carefully to become aware of and understand the hazards associated with this product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology or fire and understand the data in this SDS.

Revision Date: 05/15/18

Pearl Ex Powdered Pigment - 691 Solar Gold - Pg 9

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ACGIH	American Conference of Governmental Industrial Hygienists		
ADR	International carriage of Dangerous goods by Road		
AICS	Australian Inventory of Chemical Substances		
ATE	Acute Toxicity Estimate		
BfR	Bundesinstitut für Risikobewertung recommendations for food contact materials		
BCF	Bioconcentration Factor		
BOD5	5-day Biochemical Oxygen Demand		
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act		
CLP	Classification, Labeling and Packaging regulation		
COD	Chemical Oxygen Demand DOT Department of Transportation DSL Domestic Substances List		
EINECS	European Inventory of Existing Chemical Substances		
ECL	Existing Chemicals List (Korea)		
ENCS	Existing and New Chemical Substances Inventory (Japan)		
EN 689	Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy.		
ERG	Emergency Response Guide		
GHS	Globally Harmonized System		
HMIS	Hazardous Materials Information System IARC International Agency for Research on Cancer IATA International Air Transport Association		
ICAO	International Civil Aviation Organization IDLH Immediately Dangerous to Life and Health IMDG International Maritime Dangerous Goods		
LD50	Lethal Dose to 50% of test animal population		
MAK	Maximale Arbeitsplatz Konzentration		
NTP	National Toxicology Program		
OEL	Occupational Exposure Limit		
OSHA	Occupational Safety & Health Administration		
РВТ	Persistent, Bioaccumulative and Toxic vPvB Very Persistent and Very Bioaccumulative PEL Permissible exposure limit		
PICCS	Philippine Inventory of Commercial Chemical Substances		
PNEC	Predicted No Effect Concentration		
REACH	Registration, Evaluation and Authorization of Chemical Substances		
RID	International carriage of dangerous goods by Rail SARA Superfund Amendments and Reauthorization Act STEL Short Term Exposure Limit		
SVHC	Substance of Very High Concern		
TLV	Threshold Limit Value		
TSCA	Toxic Substances Control Act		
TWA	Time Weighted Average		
VOC	Volatile Organic Compound		
WGK	Wassergefahrdungsklasse (Water Hazard Class) WHMIS Workplace Hazardous Material Identification System		



According to Regulation (EC) No.1907/2006

n (EC) No.1907/2006

Product code: Pearl Ex #650 Micropearl

Date: 12/19/17

1.IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING

1.1 Product Identifier

Trade name: Pearl Ex #650 Micropearl

Trade code: #650

CAS number(s): 12001-26-2/13463-67-7

1.2 Relevant identified uses of the substance/mixture and uses advised against

Identified uses: Coloring agent

1.3 Details of the supplier of the safety data sheet

Company Name: Rupert, Gibbon & Spider, Inc. **Address:** 1147 Healdsburg Ave. CA, 95448 **Telephone:** 800-442-0455

1.4 Emergency telephone number

CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300 International CHEMTREC, call: 1-703-527-3887 For non-emergency assistance, call: 800-442-0455

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This substance is not classified as dangerous according to European Union Legislation.

2.2 Label elements

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Pictograms / Symbols: None S-phrase(s) 22 Do not breathe dust.

EC regulation criteria 1272/2008 (CLP):

Precautionary statements: P260 Do not breathe dust. No special labeling needed.

2.3 Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Ingredients	Chemical Name	CAS No.	CI Name	Weight in Percentage (%)
Mica	Mica	12001-26-2	CI 77019	63
TiO ₂	Titanium dioxide	13463-67-7	CI 77891	33

No components that are liable to disclose according to Regulation (EC) No.1907/2006.

Rupert, Gibbon & Spider, Inc.

Product code: Pearl Ex #650 Micropearl

4. FIRST AID MEASURES



SAFETY DATA SHEET

According to Regulation (EC) No.1907/2006

4.1 Description of first aid measures In case of skin contact: Wash off with soap and plenty of water. In case of eyes contact: Immediately flush with plenty of water about 15 minutes. If discomfort persists, get medical aid. In case of Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. In case of Inhalation: Move person to fresh air. Consult doctor in the event of any complaints. 4.2 Most important symptoms and effects, both acute and delayed We have no description of any toxic symptoms. 4.3 Indication of any immediate medical attention and special treatment needed No information available. **5. FIRE-FIGHTING MEASURES** 5.1 Extinguishing media Use extinguishing measures that are in accordance with the local regulations. For this substance/mixture no limitations of extinguishing agents are given. 5.2 Special hazards arising from the substance or mixture Not combustible. Ambient fire may liberate hazardous vapours. 5.3 Advice for fire-fighters IN the event of fire, wear self-contained breathing apparatus. Prevent fire extinguishing water from contaminating surface water or the ground water system. 6. ACCIDENTAL RELEASE MEASURES 6.1 Personal precautions, protective equipment and emergency procedures See protective measures under point 7 and 8. **6.2 Environmental precautions** Don't let product enter drains. 6.3 Methods and material for containment and cleaning up Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7.2 and 10.5). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts. 6.4 Reference to other sections See also section 8 and 13. 7. HANDLING AND STORAGE 7.1 Precautions for safe handling: Prevent formation of dust Rupert, Gibbon & Spider, Inc.

Date: 12/19/17

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According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #650 Micropearl

Date: 12/19/17

Any unavoidable deposit of dust must be regularly removed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry, keep packages closed, location away from other material.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific use are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.2 Exposure controls

Eye/face protection: Safety glasses.

Skin protection:

Hand protection:Not required.

Body protection: Protective work clothing.

Other protection: Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled.

Hygiene measures: Change contaminated clothing. Wash hands after working with substance.

Respiratory protection:

Required when dusts are generated.

Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances.

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be

properly documented.

Thermal Hazards: No information available.

Environmental exposure controls: Don't let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance: color: Odor: Odor threshold:	Powder. white powder with iridescence Odorless. No information available.
pH:	$5\sim 9$ (10% aqueous slurry).
Melting point:	No information available.
Boiling point:	No information available.
Solid/gas flammability:	No information available.
Lower explosive limit:	No information available.
Upper explosive limit:	No information available.
Vapor density:	No information available.
Flash point:	Not applicable.
	Rupert, Gibbon & Spider, Inc.

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SAFETY DATA SHEET

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #650 Micropearl

Evaporation rate:	No information available.	
Vapor pressure:	No information available.	
Relative density:	$2.4 \sim 3.0 \text{ g/cm}^3$.	
Solubility in water:	Insoluble.	
Lipid solubility:	Insoluble.	
Partition coefficient		
(n-octanol/water):	No information available.	
Auto-ignition temperature:	No information available.	
Decomposition temperature:	No information available.	
Viscosity:	No information available.	
Explosive properties:	No information available.	
Oxidizing properties:	No information available.	
9.2 Other information		
Bulk density:	15 ~ 21 g/100ml.	
Particle size:	5-25 μm.	
10. STABILITY AND REACTIVIT	Y	
10.1 Reactivity		
No information available.		
10.2 Chemical stability		
-	nt conditions (room temperature).	
10.3 Possibility of hazardous r	eactions	
No information available.		
10.4 Conditions to avoid		
10.4 Conditions to avoid Not known to date.		
Not known to date.		
Not known to date. 10.5 Incompatible materials	products	

If discomfort persists, get medical aid.

Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. **Inhalation:** Move person to fresh air. Consult doctor in the event of any complaints.

Rupert, Gibbon & Spider, Inc.

Date: 12/19/17

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SAFETY DATA SHEET

According to Regulation (EC) No.1907/2006

Product	code:	Pearl	Ex #650	Micropearl
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Date: 12/19/17

11.2 Information on toxicological effects

Aspiration hazard

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

11.3 Other information

Quantitative data on the toxicity of this product are not available.

Hazardous properties cannot be excluded, but are relatively improbable due to the compound's poor water solubility.

Our own experience has provided no indication of any hazardous potential.

Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions.

Rupert, Gibbon & Spider, Inc.



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #650 Micropearl

Date: 12/19/17

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12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information available.

- **12.2 Persistence and degradability** No information available.
- **12.3 Bioaccumulative potential** No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Leave chemicals in original containers. Do not mix with other waste.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

Not classified as dangerous in the meaning of transport regulations.

14.2 Sea transport (IMDG-Code/GGVSee)

Not classified as dangerous in the meaning of transport regulations.

14.3 Air transport (ICAO-IATA/DGR)

Not classified as dangerous in the meaning of transport regulations.

14.4 Special Precautions for User

No information available.

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.



According to Regulation (EC) No.1907/2006

Date: 12/19/17

Product code: Pearl Ex #650 Micropearl

15. REGULATORY INFORMATION

15.1Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Major Accident Hazard Legislation: Directive 96/82/EC does not apply.

National legislation

Storage class: 10 – 13.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

16.1Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can looked up at <u>www.wikipedia.org.</u>

16.2Training advice

Provide adequate information, instruction and training for operators.

Date: 5/06/2015

The information contained in this SDS is based on data from sources considered to be reliable but Rupert, Gibbon & Spider, Inc. does not guarantee the accuracy or completeness thereof. Rupert, Gibbon & Spider, Inc. urges each customer or recipient of this SDS to study it carefully to become aware of and understand the hazards associated with this product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology or fire and understand the data in this SDS.

This SDS cancels and replaces any preceding release.

Rupert, Gibbon & Spider, Inc.

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According to Regulation (EC) No.1907/2006 Revision Date 5/6/2015

Product code: Pearl Ex #651 Pearl White

Version 1.0-2015

1.IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier

Trade name: Pearl Ex #651 Pearl White

Trade code: #651

CAS number: 12001-26-2/13463-67-7

1.2 Relevant identified uses of the substance/mixture and uses advised against

Identified uses: Coloring agent

1.3 Details of the supplier of the safety data sheet

Company Name: Rupert, Gibbon & Spider, Inc.

Address: 1147 Healdsburg Avenue CA, 95448 **Telephone:** 800-442-0455

1.4 Emergency telephone number

Telephone companies: Poison Control 800-222-1222

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This substance is not classified as dangerous according to European Union Legislation.

2.2 Label elements

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Properties / Symbols: S-phrase(s) 22 Do not breathe dust.

EC regulation criteria 1272/2008 (CLP):

Precautionary statements: P260 Do not breathe dust.

No special labeling needed.

2.3 Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	Chemical Name	CAS No.	CI Name	Weight in Percentage (%)
Mica	Mica	12001-26-2	CI 77019	63 ~ 86
TiO_2	Titanium dioxide	13463-67-7	CI 77891	$14 \sim 37$

No components that are liable to disclose according to Regulation (EC) No.1907/2006.

Rupert, Gibbon & Spider, Inc.

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According to Regulation (EC) No.1907/2006 Revision Date 5/6/2015

Product code: Pearl Ex #651 Pearl White

4. FIRST AID MEASURES

4.1 Description of first aid measures

In case of skin contact: Wash off with soap and plenty of water.

In case of eyes contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

In case of Ingestion: If victim is induce vomiting, give 2-4 cupfuls of water, get medical aid. **In case of Inhalation:** Move person to fresh air. Consult doctor in the event of any complaints.

4.2 Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

4.3 Indication of any immediate medical attention and special treatment needed No information available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use extinguishing measures that are in accordance with the local regulations.

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapours.

5.3 Advice for fire-fighters

IN the event of fire, wear self-contained breathing apparatus.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2 Environmental precautions

Don't let product enter drains.

6.3 Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7.2 and 10.5).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

See also section 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Prevent formation of dust

Rupert, Gibbon & Spider, Inc.

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According to Regulation (EC) No.1907/2006 Revision Date 5/6/2015

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Any unavoidable deposit of dust must be regularly removed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry, keep packages closed, location away from other material.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific use are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.2 Exposure controls

Eye/face protection: Safety glasses.

Skin protection:

Hand protection:Not required.

Body protection: Protective work clothing.

Other protection:Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled.

Hygiene measures: Change contaminated clothing. Wash hands after working with substance.

Respiratory protection:

Required when dusts are generated.

Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances.

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be

properly documented.

Thermal Hazards:No information available.

Environmental exposure controls: Don't let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:	Powder.	
colour:	White powder with iridescence	
Odour:	Odourless.	
Odour threshold:	No information available.	
рН:	$5 \sim 9$ (10% aqueous slurry).	
Melting point:	No information available.	
Boiling point:	No information available.	
Solid/gas flammability:	No information available.	
Lower explosive limit:	No information available.	
Upper explosive limit:	No information available.	
Vapour density:	No information available.	
Flash point:	Not applicable.	
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SAFETY DATA SHEET According to Regulation (EC) No.1907/2006 Revision Date 5/6/2015

Product code: Pearl Ex #651 Pearl White

Evaporation rate:	No information available.
Vapour pressure:	No information available.
Relative density:	$2.4 \sim 3.0 \text{ g/cm}^3$.
Solubility in water:	Insoluble.
Lipid solubility:	Insoluble.
Partition coefficient	
(n-octanol/water):	No information available.
Auto-ignition temperature:	No information available.
Decomposition temperature:	No information available.
Viscosity:	No information available.
Explosive properties:	No information available.
Oxidizing properties:	No information available.
9.2 Other information	
Bulk density:	15 ~ 21 g/100ml.
Particle size:	5-25 μm.

10. STABILITY AND REACTIVITY

10.1 Reactivity

No information available.

10.2 Chemical stability

Stable under standard ambient conditions(room temperature).

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

Not known to date.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

No information available.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Aspiration hazard

Based on available data the classification criteria are not met.

Specific target organ toxicity – single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

11.2 Other information

Rupert, Gibbon & Spider, Inc.

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According to Regulation (EC) No.1907/2006 Revision Date 5/6/2015

Product code: Pearl Ex #651 Pearl White

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Quantitative data on the toxicity of this product are not available. Hazardous properties can not be excluded, but are relatively improbable due to the compound's poor water solubility. Our own experience has provided no indication of any hazardous potential.

Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information available.

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Leave chemicals in original containers. Do not mix with other waste.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

Not classified as dangerous in the meaning of transport regulations.

14.2 Sea transport(IMDG-Code/GGVSee)

Not classified as dangerous in the meaning of transport regulations.

14.3 Air transport (ICAO-IATA/DGR)

Not classified as dangerous in the meaning of transport regulations.

14.4 Special Precautions for User

No information available.

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.

Rupert, Gibbon & Spider, Inc.

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SAFETY DATA SHEET According to Regulation (EC) No.1907/2006

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Product code: Pearl Ex #651 Pearl White

Version 1.0-2015

15. REGULATORY INFORMATION

15.1Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Major Accident Hazard Legislation: Directive 96/82/EC does not apply. **National legislation** Storage class: 10 – 13.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

16.1Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can looked up at <u>www.wikipedia.org.</u>

16.2Training advice

Provide adequate information, instruction and training for operators.

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

Rupert, Gibbon & Spider, Inc.



According to Perulation International

According to Regulation (EC) No.1907/2006

	Date: 12/19/17
1.IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPA	NY/ UNDERTAKING
1.1 Product Identifier	
Trade name: Pearl Ex #652 Macropearl	
Trade code: #652	
CAS number: 12001-26-2/13463-67-7	
1.2 Relevant identified uses of the substance/mixture and uses advised	against
Identified uses: Coloring agent	
1.3 Details of the supplier of the safety data sheet	
Company Name: Rupert, Gibbon & Spider, Inc.	
Address: 1147 Healdsburg Ave. CA, 95448	
Telephone: 800-442-0455	
1.4 Emergency telephone number CHEMTREC (24HR Emergency Telephone),	
call: 1-800-424-9300	
International CHEMTREC, call: 1-703-527-3887	
For non-emergency assistance, call: 800-442-0455	
2. HAZARDS IDENTIFICATION	
2.1 Classification of the substance or mixture	
	on Logiclation
This substance is not classified as dangerous according to European Uni	on Legislation.
2.2 Labol alamants	
2.2 Label elements Directive criteria 67 / 548 / CE 00 / 45 / EC and following amondme	ants thansafi
Directive criteria, 67/548/CE, 99/45/EC and following amendme	
Directive criteria, 67/548/CE, 99/45/EC and following amendme Pictograms / Symbols: None S-phrase(s) 22 Do not breathe	
Directive criteria, 67/548/CE, 99/45/EC and following amendme Pictograms / Symbols: None S-phrase(s) 22 Do not breathe EC regulation criteria 1272/2008 (CLP):	
Directive criteria, 67/548/CE, 99/45/EC and following amendmePictograms / Symbols: NoneS-phrase(s)22Do not breatheEC regulation criteria 1272/2008 (CLP):Precautionary statements:P260 Do not breathe dust.	
Directive criteria, 67/548/CE, 99/45/EC and following amendmePictograms / Symbols: NoneS-phrase(s)22Do not breatheEC regulation criteria 1272/2008 (CLP):Precautionary statements:P260 Do not breathe dust.No special labeling needed.	
Directive criteria, 67/548/CE, 99/45/EC and following amendmePictograms / Symbols: NoneS-phrase(s)22Do not breatheEC regulation criteria 1272/2008 (CLP):Precautionary statements:P260 Do not breathe dust.	

No components that are liable to disclose according to Regulation (EC) No.1907/2006.

12001-26-2

13463-67-7

CI 77019

CI 77891

Mica

Titanium dioxide

Rupert, Gibbon & Spider, Inc.

Mica

 $TiO_2 \\$

1

76

Date: 12/19/17

Product code: Pearl Ex #652 Macropearl



SAFETY DATA SHEET According to Regulation (EC) No 1007(7)

According to Regulation (EC) No.1907/2006

In case of skin contact: Wash off with soap and plenty of water.							
In case of eyes contact: Immediately flush with plenty of water about 15 minutes.							
If discomfort persists, get medical aid.							
In case of Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. In case of Inhalation: Move person to fresh air. Consult doctor in the event of any complaints. 4.2 Most important symptoms and effects, both acute and delayed							
						We have no description of any toxic symptoms.	
						4.3 Indication of any immediate medical attention and special treatment needed	
No information available.							
5. FIRE-FIGHTING MEASURES							
5.1 Extinguishing media							
Use extinguishing measures that are in accordance with the local regulations.							
For this substance/mixture no limitations of extinguishing agents are given.							
5.2 Special hazards arising from the substance or mixture							
Not combustible.							
Ambient fire may liberate hazardous vapors.							
5.3 Advice for fire-fighters							
IN the event of fire, wear self-contained breathing apparatus.							
Prevent fire extinguishing water from contaminating surface water or the ground water sy	ystem.						
 6.2 Environmental precautions Don't let product enter drains. 6.3 Methods and material for containment and cleaning up Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7.2 and 10.5). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts. 6.4 Reference to other sections							
See also section 8 and 13.							
7. HANDLING AND STORAGE							
7.1 Precautions for safe handling:							
Prevent formation of dust							
Rupert, Gibbon & Spider, Inc.	2						
nbers: 27103-1329	Page 33 o						

MS 103 - JCQRD PEARLEX PGMNT



SAFETY DATA SHEET

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #652 Macropearl

Date: 12/19/17

Any unavoidable deposit of dust must be regularly removed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry, keep packages closed, location away from other material.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific use are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.2 Exposure controls

Eye/face protection: Safety glasses.

Skin protection:

Hand protection: Not required.

Body protection: Protective work clothing.

Other protection: Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled.

Hygiene measures: Change contaminated clothing. Wash hands after working with substance.

Respiratory protection:

Required when dusts are generated.

Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances.

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be

properly documented.

Thermal Hazards:No information available.

Environmental exposure controls: Don't let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:	Powder.		
* *	1 0 11 4011		
Color:	White Powder with iridescence		
Odor:	Odorless.		
Odor threshold:	No information available.		
pH:	5 ~ 9 (10% aqueous slurry).		
Melting point:	No information available.		
Boiling point:	No information available.		
Solid/gas flammability:	No information available.		
Lower explosive limit:	No information available.		
Upper explosive limit:	No information available.		
Vapor density:	No information available.		
	Rupert, Gibbon & Spider, Inc.		

Date: 12/19/17



According to Regulation (EC) No.1907/2006

Product	code:	Pearl	Ex #652	Macropearl

Flash point:

Not applicable.

Rupert, Gibbon & Spider, Inc.

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Date: 12/19/17

MS 103 - JCQRD PEARLEX PGMNT



SAFETY DATA SHEET

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #652 Macropearl

No information available. **Evaporation rate:** No information available. Vapor pressure: **Relative density:** $2.4 \sim 3.0 \text{ g/cm}^3$. Solubility in water: Insoluble. Lipid solubility: Insoluble. **Partition coefficient** (n-octanol/water): No information available. Auto-ignition temperature: No information available. **Decomposition temperature:** No information available. Viscosity: No information available. **Explosive properties:** No information available. No information available. **Oxidizing properties:** 9.2 Other information $15 \sim 21 \text{ g/100ml}$ **Bulk density:** 5-25 μm. Particle size: **10. STABILITY AND REACTIVITY 10.1 Reactivity** No information available. **10.2 Chemical stability** Stable under standard ambient conditions (room temperature). 10.3 Possibility of hazardous reactions No information available. **10.4 Conditions to avoid** Not known to date. **10.5 Incompatible materials** No information available. **10.6 Hazardous decomposition products** No information available. **11. TOXICOLOGICAL INFORMATION**

11.1 Likely routes of exposure:

Skin contact: Wash off with soap and plenty of water.

Eye contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. **Inhalation:** Move person to fresh air. Consult doctor in the event of any complaints.

Rupert, Gibbon & Spider, Inc.



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #652 Macropearl

Date: 12/19/17

11.2 Information on toxicological effects

Aspiration hazard

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

11.3 Other information

Quantitative data on the toxicity of this product are not available.

Hazardous properties cannot be excluded, but are relatively improbable due to the compound's poor water solubility.

Our own experience has provided no indication of any hazardous potential.

Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions.



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #652 Macropearl

Date: 12/19/17

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information available.

- **12.2 Persistence and degradability** No information available.
- **12.3 Bioaccumulative potential** No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Leave chemicals in original containers. Do not mix with other waste.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

Not classified as dangerous in the meaning of transport regulations.

14.2 Sea transport (IMDG-Code/GGVSee)

Not classified as dangerous in the meaning of transport regulations.

14.3 Air transport (ICAO-IATA/DGR)

Not classified as dangerous in the meaning of transport regulations.

14.4 Special Precautions for User

No information available.

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #652 Macropearl

Date: 12/19/17

15. REGULATORY INFORMATION

15.1Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Major Accident Hazard Legislation: Directive 96/82/EC does not apply.

National legislation

Storage class: 10 – 13.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

16.1Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can looked up at <u>www.wikipedia.org.</u>

16.2Training advice

Provide adequate information, instruction and training for operators.

Date: 5/06/2015

The information contained in this SDS is based on data from sources considered to be reliable but Rupert, Gibbon & Spider, Inc. does not guarantee the accuracy or completeness thereof. Rupert, Gibbon & Spider, Inc. urges each customer or recipient of this SDS to study it carefully to become aware of and understand the hazards associated with this product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology or fire and understand the data in this SDS.

This SDS cancels and replaces any preceding release.

ACQUARD

SAFETY DATA SHEET According to Regulation (EC) No.1907/2006

Revision Date 5/6/2015

Page 40 of 229

Product code: Pearl Ex #653 Red Russet

Version 1.0-2015

1.IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier

Trade name: Pearl Ex #653 Red Russet

Trade code: #653

CAS number: 12001-26-2/1309-37-1

1.2 Relevant identified uses of the substance/mixture and uses advised against

Identified uses: Coloring agent

1.3 Details of the supplier of the safety data sheet

Company Name: Rupert, Gibbon & Spider, Inc.

 Address: 1147 Healdsburg Avenue CA, 95448

 Telephone:
 800-442-0455

1.4 Emergency telephone number

Telephone companies: Poison Control 800-222-1222

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This substance is not classified as dangerous according to European Union Legislation.

2.2 Label elements

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Properties / Symbols: S-phrase(s) 22 Do not breathe dust.

EC regulation criteria 1272/2008 (CLP):

Precautionary statements: P260 Do not breathe dust.

No special labeling needed.

2.3 Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Ingredients	Chemical Name	CAS No.	CI Name	Weight in Percentage (%)
Mica	Mica	12001-26-2	CI 77019	49 ~ 57
Fe ₂ O ₃	Diiron Trioxide	1309-37-1	CI 77491	43 ~ 51

No components that are liable to disclose according to Regulation (EC) No.1907/2006.

Rupert, Gibbon & Spider, Inc.

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SAFETY DATA SHEET According to Regulation (EC) No.1907/2006

Revision Date 5/6/2015

Product code: Pearl Ex #653 Red Russet

4. FIRST AID MEASURES

4.1 Description of first aid measures

In case of skin contact: Wash off with soap and plenty of water.

In case of eyes contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

In case of Ingestion: If victim is induce vomiting, give 2-4 cupfuls of water, get medical aid. **In case of Inhalation:** Move person to fresh air. Consult doctor in the event of any complaints.

4.2 Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

4.3 Indication of any immediate medical attention and special treatment needed No information available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use extinguishing measures that are in accordance with the local regulations.

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapours.

5.3 Advice for fire-fighters

IN the event of fire, wear self-contained breathing apparatus.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2 Environmental precautions

Don't let product enter drains.

6.3 Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7.2 and 10.5).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

See also section 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Prevent formation of dust

Rupert, Gibbon & Spider, Inc.

Version 1.0-2015



SAFETY DATA SHEET According to Regulation (EC) No.1907/2006

Revision Date 5/6/2015

Product code: Pearl Ex #653 Red Russet

Version 1.0-2015

Any unavoidable deposit of dust must be regularly removed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry, keep packages closed, location away from other material.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific use are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.2 Exposure controls

Eye/face protection: Safety glasses.

Skin protection:

Hand protection:Not required.

Body protection: Protective work clothing.

Other protection: Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled.

Hygiene measures: Change contaminated clothing. Wash hands after working with substance.

Respiratory protection:

Required when dusts are generated.

Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances.

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be

properly documented.

Thermal Hazards: No information available.

Environmental exposure controls: Don't let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:	Powder.	
colour:	Pearlescent red powder	
Odour:	Odourless.	
Odour threshold:	No information available.	
pH:	$5 \sim 9$ (10% aqueous slurry).	
Melting point:	No information available.	
Boiling point:	No information available.	
Solid/gas flammability:	No information available.	
Lower explosive limit:	No information available.	
Upper explosive limit:	No information available.	
Vapour density:	No information available.	
Flash point:	Not applicable.	
		Page 1 of 6



MSDS for #27103 - JCQRD PEARLEX PGMNT SAFETY DATA SHEET According to Regulation (EC) No.1907/2 Revision Date 5/6/2015 According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #653 Red Russet

Version 1.0-2015

Evaporation rate:	No information available.	
Vapour pressure:	No information available.	
Relative density:	$2.7 \sim 3.3 \text{ g/cm}^3$.	
Solubility in water:	Insoluble.	
Lipid solubility:	Insoluble.	
Partition coefficient		
(n-octanol/water):	No information available.	
Auto-ignition temperature:	No information available.	
Decomposition temperature:	No information available.	
Viscosity:	No information available.	
Explosive properties:	No information available.	
Oxidizing properties:	No information available.	
9.2 Other information		
Bulk density:	22 ~ 28 g/100ml	
Particle size:	$10 \sim 60 \ \mu m.$	
10. STABILITY AND REACTIVIT 10.1 Reactivity	Y	
No information available.		
10.2 Chemical stability		
-	t conditions(room temperature).	
10.3 Possibility of hazardous re		
No information available.		
10.4 Conditions to avoid		
Not known to date.		
10.5 Incompatible materials		
No information available.		
10.6 Hazardous decomposition	products	
No information available.	-	
11. TOXICOLOGICAL INFORMAT	TON	
11.1 Information on toxicologic	cal effects	
Aspiration hazard		
Based on available data the cl	assification criteria are not met.	
Specific target organ toxici		
The substance or mixture is r	not classified as specific target organ toxicant, single exp	osure.
Specific target organ toxici		
The substance or mixture is r	not classified as specific target organ toxicant, repeated e	exposure.
11.2 Other information		
Ru	ıpert, Gibbon & Spider, Inc.	Page 1 of 6

MSDS for #27103 - JCQRD PEARLEX PGMNT



SAFETY DATA SHEET According to Regulation (EC) No.1907/2006 Revision Date 5/6/2015

Product code: Pearl Ex #653 Red Russet

Quantitative data on the toxicity of this product are not available. Hazardous properties can not be excluded, but are relatively improbable due to the compound's poor water solubility. Our own experience has provided no indication of any hazardous potential. Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ

functions.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information available.

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Leave chemicals in original containers. Do not mix with other waste.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

Not classified as dangerous in the meaning of transport regulations.

14.2 Sea transport(IMDG-Code/GGVSee)

Not classified as dangerous in the meaning of transport regulations.

14.3 Air transport (ICAO-IATA/DGR)

Not classified as dangerous in the meaning of transport regulations.

14.4 Special Precautions for User

No information available.

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.

Rupert, Gibbon & Spider, Inc.

Page 1 of 6

5	CQUARD
	JACC

SAFETY DATA SHEET According to Regulation (EC) No.1907/2006 Revision Date 5/6/2015

Product code: Pearl Ex #653 Red Russet

Version 1.0-2015

15. REGULATORY INFORMATION

15.1Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Major Accident Hazard Legislation: Directive 96/82/EC does not apply. **National legislation** Storage class: 10 – 13.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

16.1Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can looked up at <u>www.wikipedia.org.</u>

16.2Training advice

Provide adequate information, instruction and training for operators.

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

IEET

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #654 Super Russet	Date: 12/19/17
1.IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UND	DERTAKING
1.1 Product Identifier	
Trade name: Pearl Ex #654 Super Russet	
Trade code: #654	
CAS number: 12001-26-2/1309-37-1	
1.2 Relevant identified uses of the substance/mixture and uses advised against	
Identified uses: Coloring agent	
1.3 Details of the supplier of the safety data sheet	
Company Name: Rupert, Gibbon & Spider, Inc. Address: 1147 Healdsburg Ave. CA, 95448 Telephone: 800-442-0455	
1.4 Emergency telephone number CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300 International CHEMTREC, call: 1-703-527-3887 For non-emergency assistance, call: 800-442-0455	
2. HAZARDS IDENTIFICATION	
2.1 Classification of the substance or mixture	
This substance is not classified as dangerous according to European Union Legi	slation.
2.2 Label elements	
Directive criteria, 67/548/CE, 99/45/EC and following amendments there	eof:
Pictograms / Symbols: None S-phrase(s) 22 Do not breathe dust.	
EC regulation criteria 1272/2008 (CLP):	
Precautionary statements: P260 Do not breathe dust.	
No special labeling needed.	
2.3 Other hazards	

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Chemical Name	CAS No.	CI Name	Weight in Percentage (%)
Mica	12001-26-2	CI 77019	56
Diiron Trioxide	1309-37-1	CI 77491	44
		12001 20 2	

No components that are liable to disclose according to Regulation (EC) No.1907/2006.

Rupert, Gibbon & Spider, Inc.

Item Numbers: 27103-1329

1

Date: 12/19/17

Y DATA SHEET

Product code: Pearl Ex #654 Super Russet

4.1 Description of first aid measures

4. FIRST AID MEASURES

MS

According to Regulation (EC) No.1907/2006

In case of skin cont	tact: Wash off with soap and plenty of water.	
In case of eyes cont	tact: Immediately flush with plenty of water about 15 minutes.	
	If discomfort persists, get medical aid.	
In case of Ingestion	n: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medica	al aid.
-	n : Move person to fresh air. Consult doctor in the event of any complaints.	
	mptoms and effects, both acute and delayed	
	ion of any toxic symptoms.	
	mmediate medical attention and special treatment needed	
No information avail		
5. FIRE-FIGHTING MEA	ASURES	
5.1 Extinguishing med	lia	
Use extinguishing m	easures that are in accordance with the local regulations.	
For this substance/n	nixture no limitations of extinguishing agents are given.	
5.2 Special hazards ar	ising from the substance or mixture	
Not combustible.		
Ambient fire may lib	perate hazardous vapors.	
5.3 Advice for fire-figh		
	wear self-contained breathing apparatus.	
	ishing water from contaminating surface water or the ground water system.	
6. ACCIDENTAL RELEA		
6.1 Personal precaution	ons, protective equipment and emergency procedures	
See protective measures	s under point 7 and 8.	
6.2 Environmental pre	ecautions	
Don't let product ent	ter drains.	
6.3 Methods and mate	rial for containment and cleaning up	
Cover drains. Collect	, bind, and pump off spills.	
Observe possible ma	aterial restrictions (see sections 7.2 and 10.5).	
	e of properly. Clean up affected area. Avoid generation of dusts.	
6.4 Reference to other	sections	
See also section 8 and	113.	
7. HANDLING AND ST		
7.1 Precautions for saf	-	
Prevent formation of du	st	
	Pupert Cibbon & Spider Inc	
	Rupert, Gibbon & Spider, Inc.	2
nbers: 27103-1329		Page 47 o

03 - JCQRD PEARLEX POMIL

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #654 Super Russet

Date: 12/19/17

Any unavoidable deposit of dust must be regularly removed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry, keep packages closed, location away from other material.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific use are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.2 Exposure controls

Eye/face protection: Safety glasses.

Skin protection:

Hand protection: Not required.

Body protection: Protective work clothing.

Other protection: Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled.

Hygiene measures: Change contaminated clothing. Wash hands after working with substance.

Respiratory protection:

Required when dusts are generated.

Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances.

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be

properly documented.

Thermal Hazards:No information available.

Environmental exposure controls: Don't let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

-	5 - - - - - - - -	
Appearance:	Powder.	
Color:	Pearlescent red powder	
Odor:	Odorless.	
Odor threshold:	No information available.	
pH:	$5\sim 9$ (10% aqueous slurry	
Melting point:	No information available.	
Boiling point:	No information available.	
Solid/gas flammability:	No information available.	
Lower explosive limit:	No information available.	
Upper explosive limit:	No information available.	
Vapor density:	No information available. Rupert, Gibbon & Spider, Inc.	

3

MS

Date: 12/19/17



Product code:	Pearl Ex #65	4 Super Russet
Troudot oouc.		+ ouper masser

Flash point:

Not applicable.

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Date: 12/19/17

03 - JCQRD PEARLEX

RLEX PGMNT SAFETY DATA SHEET According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #654 Super Russet

Evaporation rate:	No information available.		
Vapor pressure:	No information available.		
Relative density:	$2.6 \sim 3.2 \text{ g/cm}^3$.		
Solubility in water:	Insoluble.		
Lipid solubility:	Insoluble.		
Partition coefficient			
(n-octanol/water):	No information available.		
Auto-ignition temperature:	No information available.		
Decomposition temperature:	No information available.		
Viscosity:	No information available.		
Explosive properties:	No information available.		
Oxidizing properties:	No information available.		
9.2 Other information			
Bulk density:	$21 \sim 27$ g/100ml.		
Particle size:	10 ~ 60 μm.		
 10.3 Possibility of hazardous re No information available. 10.4 Conditions to avoid Not known to date. 10.5 Incompatible materials No information available. 			
10.6 Hazardous decomposition	10.6 Hazardous decomposition products No information available.		

If discomfort persists, get medical aid.

Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. Inhalation: Move person to fresh air. Consult doctor in the event of any complaints.

Rupert, Gibbon & Spider, Inc.

MS

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According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #654 Super Russet

Date: 12/19/17

11.2 Information on toxicological effects

Aspiration hazard

Based on available data the classification criteria are not met.

Specific target organ toxicity – single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity – repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

11.2 Other information

Quantitative data on the toxicity of this product are not available.

Hazardous properties cannot be excluded, but are relatively improbable due to the compound's poor water solubility.

Our own experience has provided no indication of any hazardous potential.

Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions.

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #654 Super Russet

Date: 12/19/17

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information available.

12.2 Persistence and degradability No information available.

12.3 Bioaccumulative potential No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Leave chemicals in original containers. Do not mix with other waste.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

Not classified as dangerous in the meaning of transport regulations.

14.2 Sea transport (IMDG-Code/GGVSee)

Not classified as dangerous in the meaning of transport regulations.

14.3 Air transport (ICAO-IATA/DGR)

Not classified as dangerous in the meaning of transport regulations.

14.4 Special Precautions for User

No information available.

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.

Rupert, Gibbon & Spider, Inc.

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According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #654 Super Russet	Date: 12/
15. REGULATORY INFORMATION	
15.1Safety, health and environmental regulations/legislation specific for the subs	tance or
mixture	
EU regulations	

Major Accident Hazard Legislation: Directive 96/82/EC does not apply. **National legislation** Storage class: 10 – 13.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

16.1Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can looked up at www.wikipedia.org.

16.2Training advice

Provide adequate information, instruction and training for operators.

Date: 5/06/2015

The information contained in this SDS is based on data from sources considered to be reliable but Rupert, Gibbon & Spider, Inc. does not guarantee the accuracy or completeness thereof. Rupert, Gibbon & Spider, Inc. urges each customer or recipient of this SDS to study it carefully to become aware of and understand the hazards associated with this product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology or fire and understand the data in this SDS.

This SDS cancels and replaces any preceding release.



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03 - JCQRD PEARLEX PGMNT SAFETY DATA SHEET

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #655 Super Copper	Date: 12/19/17
1.IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UN	DERTAKING
1.1 Product Identifier	
Trade name: Pearl Ex #655 Super Copper	
Trade code: #655	
CAS number: 12001-26-2/1309-37-1	
1.2 Relevant identified uses of the substance/mixture and uses advised against	
Identified uses: Coloring agent	
1.3 Details of the supplier of the safety data sheet	
Company Name: Rupert, Gibbon & Spider, Inc. Address: 1147 Healdsburg Ave. CA, 95448 Telephone: 800-442-0455	
1.4 Emergency telephone number CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300 International CHEMTREC, call: 1-703-527-3887 For non-emergency assistance, call: 800-442-0455	
2. HAZARDS IDENTIFICATION	
2.1 Classification of the substance or mixture	
This substance is not classified as dangerous according to European Union Legisl	ation.
2.2 Label elements	
Directive criteria, 67/548/CE, 99/45/EC and following amendments ther	eof:
Pictograms / Symbols: None S-phrase(s) 22 Do not breathe dust.	
EC regulation criteria 1272/2008 (CLP):	

Precautionary statements: P260 Do not breathe dust. No special labeling needed.

2.3 Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Ingredients	Chemical Name	CAS No.	CI Name	Weight in Percentage (%)
Mica	Mica	12001-26-2	CI 77019	67
Fe ₂ O ₃	Diiron Trioxide	1309-37-1	CI 77491	33

No components that are liable to disclose according to Regulation (EC) No.1907/2006.

Rupert, Gibbon & Spider, Inc.

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Date: 12/19/17

Product code: Pearl Ex #655 Super Copper



03 - JCQRD PEARLEX PGMNT SAFETY DATA SHEET

According to Regulation (EC) No.1907/2006

4. FIRST AID MEASURES	
4.1 Description of first aid measures	
In case of skin contact: Wash off with soap and plenty of water.	
In case of eyes contact: Immediately flush with plenty of water about 1	15 minutes.
If discomfort persists, get medical aid.	
In case of Ingestion: If victim is conscious, induce vomiting, give 2-4 cu	upfuls of water, get medical aid.
In case of Inhalation: Move person to fresh air. Consult doctor in the even	
4.2 Most important symptoms and effects, both acute and delayed	r start s
We have no description of any toxic symptoms.	
4.3 Indication of any immediate medical attention and special treatme	entneeded
No information available.	
5. FIRE-FIGHTING MEASURES	
5.1 Extinguishing media	
Use extinguishing measures that are in accordance with the local regul	ations.
For this substance/mixture no limitations of extinguishing agents are gi	
5.2 Special hazards arising from the substance or mixture	
Not combustible.	
Ambient fire may liberate hazardous vapours.	
5.3 Advice for fire-fighters	
IN the event of fire, wear self-contained breathing apparatus.	
Prevent fire extinguishing water from contaminating surface water or t	he ground water system.
6. ACCIDENTAL RELEASE MEASURES	
6.1 Personal precautions, protective equipment and emergency proce	edures
See protective measures under point 7 and 8.	
6.2 Environmental precautions	
Don't let product enter drains.	
6.3 Methods and material for containment and cleaning up	
Cover drains. Collect, bind, and pump off spills.	
Observe possible material restrictions (see sections 7.2 and 10.5).	
Take up dry. Dispose of properly. Clean up affected area. Avoid generation	on of dusts.
6.4 Reference to other sections	
See also section 8 and 13.	
7. HANDLING AND STORAGE	
7.1 Precautions for safe handling:	
Prevent formation of dust	
Rupert, Gibbon & Spider, Inc.	2
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SAFETY DATA SHEET

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #655 Super Copper

Date: 12/19/17

Any unavoidable deposit of dust must be regularly removed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry, keep packages closed, location away from other material.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific use are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.2 Exposure controls

Eye/face protection: Safety glasses.

Skin protection:

Hand protection: Not required.

Body protection: Protective work clothing.

Other protection: Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled.

Hygiene measures: Change contaminated clothing. Wash hands after working with substance.

Respiratory protection:

Required when dusts are generated.

Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances.

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be

properly documented.

Thermal Hazards:No information available.

Environmental exposure controls: Don't let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Powder.		
Pearlescent red powder		
Odorless.		
No information available.		
$5\sim 9$ (10% aqueous slurry).		
No information available.		
Rupert, Gibbon & Spider, Inc.		



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #655 Super Copper

Date: 12/19/17

Flash point:

Not applicable.

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SAFETY DATA SHEET According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #655 Super Copper

Date: 12/19/17

Evaporation rate: No information available.			
Vapor pressure: No information available.			
Relative density:	$2.6 \sim 3.2 \text{ g/cm}^3$.		
Solubility in water:	Insoluble.		
Lipid solubility:	Insoluble.		
Partition coefficient			
(n-octanol/water):	No information available.		
Auto-ignition temperature:	No information available.		
Decomposition temperature:	No information available.		
Viscosity:	No information available.		
Explosive properties:	No information available.		
Oxidizing properties:	No information available.		
9.2 Other information			
Bulk density:	20 ~ 26 g/100ml		
Particle size:	10-100 μm.		
	10 100 μm		
10. STABILITY AND REACTIVIT	Y		
10.1 Reactivity			
No information available.			
10.2 Chemical stability			
Stable under standard ambier	nt conditions(room temperature).		
10.3 Possibility of hazardous re	actions		
No information available.			
10.4 Conditions to avoid			
Not known to date.			
10.5 Incompatible materials			
No information available.			
10.6 Hazardous decomposition	products		
No information available.			
11. TOXICOLOGICAL INFORMAT 11.1 Likely routes of exposure:			
Skin contact: Wash off with se			
	h with plenty of water about 15 minutes.		
	If discomfort persists, get medical aid.		
_	ous, induce vomiting, give 2-4 cupfuls of water, get medical aid.		

Inhalation: Move person to fresh air. Consult doctor in the event of any complaints.

Rupert, Gibbon & Spider, Inc.

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103 - JCQRD PEARLEX PGMNT SAFETY DATA SHEET According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #655 Super Copper

Date: 12/19/17

11.2 Information on toxicological effects

Aspiration hazard

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

11.2 Other information

Quantitative data on the toxicity of this product are not available.

Hazardous properties cannot be excluded, but are relatively improbable due to the compound's poor water solubility.

Our own experience has provided no indication of any hazardous potential.

Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions.



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #655 Super Copper

Date: 12/19/17

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information available.

- **12.2 Persistence and degradability** No information available.
- 12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Leave chemicals in original containers. Do not mix with other waste.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

Not classified as dangerous in the meaning of transport regulations.

14.2 Sea transport (IMDG-Code/GGVSee)

Not classified as dangerous in the meaning of transport regulations.

14.3 Air transport (ICAO-IATA/DGR)

Not classified as dangerous in the meaning of transport regulations.

14.4 Special Precautions for User

No information available.

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.

Rupert, Gibbon & Spider, Inc.

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103 - JCQRD PEARLEX PGMNT SAFETY DATA SHEET

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #655 Super Copper	Date: 12/19/17
15. REGULATORY INFORMATION	
15.1Safety, health and environmental regulations/legislation	specific for the substance or
mixture	
EU regulations	
Major Accident Hazard Legislation: Directive 96/82/EC does	not apply.
National legislation	
Storage class: 10 – 13.	
15.2 Chemical Safety Assessment	
For this product a chemical safety assessment was not carrie	ed out.

16. OTHER INFORMATION

16.1Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can looked up at www.wikipedia.org.

16.2Training advice

Provide adequate information, instruction and training for operators.

Date: 5/06/2015

The information contained in this SDS is based on data from sources considered to be reliable but Rupert, Gibbon & Spider, Inc. does not guarantee the accuracy or completeness thereof. Rupert, Gibbon & Spider, Inc. urges each customer or recipient of this SDS to study it carefully to become aware of and understand the hazards associated with this product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology or fire and understand the data in this SDS.

This SDS cancels and replaces any preceding release.

Mene in #27103 - JCQRD PEARLEX PGMNT



SAFETY DATA SHEET

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #656 Brilliant Gold

Date: 12/19/17

1.IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING

1.1 Product Identifier

Trade name: Pearl Ex #656 Brilliant Gold

Trade code: #656

CAS number: 12001-26-2/13463-67-7/1309-37-1

1.2 Relevant identified uses of the substance/mixture and uses advised against

Identified uses: Coloring agent

1.3 Details of the supplier of the safety data sheet

Company Name: Rupert, Gibbon & Spider, Inc. **Address:** 1147 Healdsburg Ave. CA, 95448 **Telephone:** 800-442-0455

1.4 Emergency telephone number

CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300 International CHEMTREC, call: 1-703-527-3887 For non-emergency assistance, call: 800-442-0455

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This substance is not classified as dangerous according to European Union Legislation.

2.2 Label elements

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Pictograms / Symbols: None S-phrase(s) 22 Do not breathe dust.

EC regulation criteria 1272/2008 (CLP):

Precautionary statements: P260 Do not breathe dust.

No special labeling needed.

2.3 Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Ingredients	Chemical Name	CAS No.	CI Name	Weight in Percentage (%)
Mica	Mica	12001-26-2	CI 77019	60
TiO ₂	Titanium dioxide	13463-67-7	CI 77891	22
Fe ₂ O ₃	Diiron Trioxide	1309-37-1	CI 77491	18

No components that are liable to disclose according to Regulation (EC) No.1907/2006.

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According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #656 Brilliant Gold Date: 12/19/17 **4. FIRST AID MEASURES** 4.1 Description of first aid measures In case of skin contact: Wash off with soap and plenty of water. In case of eyes contact: Immediately flush with plenty of water about 15 minutes. If discomfort persists, get medical aid. In case of Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. In case of Inhalation: Move person to fresh air. Consult doctor in the event of any complaints. 4.2 Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

4.3 Indication of any immediate medical attention and special treatment needed No information available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use extinguishing measures that are in accordance with the local regulations.

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapours.

5.3 Advice for fire-fighters

IN the event of fire, wear self-contained breathing apparatus.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2 Environmental precautions

Don't let product enter drains.

6.3 Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7.2 and 10.5).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

See also section 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Prevent formation of dust

Mene for #37103 - JCQRD PEARLEX PGMNT



SAFETY DATA SHEET

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #656 Brilliant Gold

Any unavoidable deposit of dust must be regularly removed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry, keep packages closed, location away from other material.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific use are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.2 Exposure controls

Eye/face protection: Safety glasses.

Skin protection:

Hand protection: Not required.

Body protection: Protective work clothing.

Other protection: Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled.

Hygiene measures: Change contaminated clothing. Wash hands after working with substance.

Respiratory protection:

Required when dusts are generated.

Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances.

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be

properly documented.

Thermal Hazards:No information available.

Environmental exposure controls: Don't let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:	Powder.
Color:	Pearlescent gold powder
Odor:	Odorless.
Odor threshold:	No information available.
pH:	$5\sim 9$ (10% aqueous slurry).
Melting point:	No information available.
Boiling point:	No information available.
Solid/gas flammability:	No information available.
Lower explosive limit:	No information available.
Upper explosive limit:	No information available.
Vapor density:	No information available.
Flash point:	Not applicable.
	Rupert, Gibbon & Spider, Inc.

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Date: 12/19/17

Mene tor #27103 - JCQRD PEARLEX PGMNT



SAFETY DATA SHEET

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #656 Brilliant Gold

Evaporation rate:	No information available.			
Vapor pressure:	No information available.			
Relative density: $2.5 \sim 3.1 \text{g/cm}^3$.				
Solubility in water:	Insoluble.			
Lipid solubility:	Insoluble.			
Partition coefficient				
(n-octanol/water):	No information available.			
Auto-ignition temperature:	No information available.			
Decomposition temperature:	No information available.			
Viscosity:	No information available.			
Explosive properties:	No information available.			
Oxidizing properties:	No information available.			
9.2 Other information				
Bulk density:	$20 \sim 26 \text{ g/100ml}.$			
Particle size:	10-60 μm.			
10. STABILITY AND REACTIVITY	10. STABILITY AND REACTIVITY			
10.1 Reactivity	10.1 Reactivity			
No information available.				
10.2 Chemical stability				
Stable under standard ambient conditions(room temperature).				
10.3 Possibility of hazardous rea	actions			
No information available.				
10.4 Conditions to avoid				
Not known to date.				
10.5 Incompatible materials				
No information available.				
10.6 Hazardous decomposition	products			
No information available.				
11. TOXICOLOGICAL INFORMAT	ION			

11.1 Likely routes of exposure:

Skin contact: Wash off with soap and plenty of water.

Eye contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. Inhalation: Move person to fresh air. Consult doctor in the event of any complaints.

Rupert, Gibbon & Spider, Inc.

Date: 12/19/17



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #656 Brilliant Gold

Date: 12/19/17

11.2 Information on toxicological effects

Aspiration hazard

Based on available data the classification criteria are not met.

Specific target organ toxicity – single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

11.3 Other information

Quantitative data on the toxicity of this product are not available.

Hazardous properties cannot be excluded, but are relatively improbable due to the compound's poor water solubility.

Our own experience has provided no indication of any hazardous potential.

Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions.



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #656 Brilliant Gold

Date: 12/19/17

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information available.

- **12.2 Persistence and degradability** No information available.
- **12.3 Bioaccumulative potential** No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Leave chemicals in original containers. Do not mix with other waste.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

Not classified as dangerous in the meaning of transport regulations.

14.2 Sea transport (IMDG-Code/GGVSee)

Not classified as dangerous in the meaning of transport regulations.

14.3 Air transport (ICAO-IATA/DGR)

Not classified as dangerous in the meaning of transport regulations.

14.4 Special Precautions for User

No information available.

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.

Mene for #27103 - JCQRD PEARLEX PGMNT



SAFETY DATA SHEET

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #656 Brilliant Gold

Date: 12/19/17

15. REGULATORY INFORMATION

15.1Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Major Accident Hazard Legislation: Directive 96/82/EC does not apply.

National legislation

Storage class: 10 – 13.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

16.1Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can looked up at <u>www.wikipedia.org.</u>

16.2Training advice

Provide adequate information, instruction and training for operators.

Date: 5/06/2015

The information contained in this SDS is based on data from sources considered to be reliable but Rupert, Gibbon & Spider, Inc. does not guarantee the accuracy or completeness thereof. Rupert, Gibbon & Spider, Inc. urges each customer or recipient of this SDS to study it carefully to become aware of and understand the hazards associated with this product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology or fire and understand the data in this SDS.

This SDS cancels and replaces any preceding release.



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #657 Sparkle Gold

Date: 12/19/17

1.IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING

1.1 Product Identifier

Trade name: Pearl Ex #657 Sparkle Gold

Trade code: #657

CAS number: 12001-26-2/13463-67-7/1309-37-1

1.2 Relevant identified uses of the substance/mixture and uses advised against

Identified uses: Coloring agent

1.3 Details of the supplier of the safety data sheet

Company Name: Rupert, Gibbon & Spider, Inc. **Address:** 1147 Healdsburg Ave. CA, 95448 **Telephone:** 800-442-0455

1.4 Emergency telephone number

CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300 International CHEMTREC, call: 1-703-527-3887 For non-emergency assistance, call: 800-442-0455

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This substance is not classified as dangerous according to European Union Legislation.

2.2 Label elements

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Pictograms / Symbols: None S-phrase(s) 22 Do not breathe dust.

EC regulation criteria 1272/2008 (CLP):

Precautionary statements: P260 Do not breathe dust. No special labeling needed.

2.3 Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Ingredients	Chemical Name	CAS No.	CI Name	Weight in Percentage (%)
Mica	Mica	12001-26-2	CI 77019	60
TiO ₂	Titanium dioxide	13463-67-7	CI 77891	24
Fe ₂ O ₃	Diiron Trioxide	1309-37-1	CI 77491	16

No components that are liable to disclose according to Regulation (EC) No.1907/2006.



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #657 Sparkle Gold Date: 12/19/17 4. FIRST AID MEASURES 4.1 Description of first aid measures

In case of skin contact: Wash off with soap and plenty of water.

In case of eyes contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

In case of Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. **In case of Inhalation:** Move person to fresh air. Consult doctor in the event of any complaints.

4.2 Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

4.3 Indication of any immediate medical attention and special treatment needed No information available.

no mormation available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use extinguishing measures that are in accordance with the local regulations.

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapors.

5.3 Advice for fire-fighters

IN the event of fire, wear self-contained breathing apparatus.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2 Environmental precautions

Don't let product enter drains.

6.3 Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7.2 and 10.5).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

See also section 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Prevent formation of dust



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #657 Sparkle Gold

Any unavoidable deposit of dust must be regularly removed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry, keep packages closed, location away from other material.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific use are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.2 Exposure controls

Eye/face protection: Safety glasses.

Skin protection:

Hand protection: Not required.

Body protection: Protective work clothing.

Other protection: Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled.

Hygiene measures: Change contaminated clothing. Wash hands after working with substance.

Respiratory protection:

Required when dusts are generated.

Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances.

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be

properly documented.

Thermal Hazards: No information available.

Environmental exposure controls: Don't let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:	Powder.
Color:	Pearlescent gold powder
Odor:	Odorless.
Odor threshold:	No information available.
pH:	$5 \sim 9$ (10% aqueous slurry).
Melting point:	No information available.
Boiling point:	No information available.
Solid/gas flammability:	No information available.
Lower explosive limit:	No information available.
Upper explosive limit:	No information available.
Vapour density:	No information available.
Flash point:	Not applicable.

Rupert, Gibbon & Spider, Inc.

Date: 12/19/17

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SAFETY DATA SHEET

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #657 Sparkle Gold

Evaporation rate:	No information available.		
Vapor pressure:	No information available.		
Relative density:	$2.5 \sim 3.1 \text{g/cm}^3$.		
Solubility in water:	Insoluble.		
Lipid solubility:	Insoluble.		
Partition coefficient			
(n-octanol/water):	No information available.		
Auto-ignition temperature:	No information available.		
Decomposition temperature:	No information available.		
Viscosity:	No information available.		
Explosive properties:	No information available.		
Oxidizing properties:	No information available.		
9.2 Other information			
Bulk density:	$20 \sim 26$ g/100ml.		
Particle size:	10-60 μm.		

10. STABILITY AND REACTIVITY

10.1 Reactivity

No information available.

10.2 Chemical stability

Stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

Not known to date.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

No information available.

11. TOXICOLOGICAL INFORMATION

11.1 Likely routes of exposure:

Skin contact: Wash off with soap and plenty of water.

Eye contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. **Inhalation:** Move person to fresh air. Consult doctor in the event of any complaints.

Rupert, Gibbon & Spider, Inc.

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Date: 12/19/17



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #657 Sparkle Gold

Date: 12/19/17

11.2 Information on toxicological effects

Aspiration hazard

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

11.3 Other information

Quantitative data on the toxicity of this product are not available.

Hazardous properties can not be excluded, but are relatively improbable due to the compound's poor water solubility.

Our own experience has provided no indication of any hazardous potential.

Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions.



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #657 Sparkle Gold

Date: 12/19/17

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information available.

- **12.2 Persistence and degradability** No information available.
- 12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Leave chemicals in original containers. Do not mix with other waste.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

Not classified as dangerous in the meaning of transport regulations.

14.2 Sea transport (IMDG-Code/GGVSee)

Not classified as dangerous in the meaning of transport regulations.

14.3 Air transport (ICAO-IATA/DGR)

Not classified as dangerous in the meaning of transport regulations.

14.4 Special Precautions for User

No information available.

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #657 Sparkle Gold

Date: 12/19/17

15. REGULATORY INFORMATION

15.1Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Major Accident Hazard Legislation: Directive 96/82/EC does not apply.

National legislation

Storage class: 10 – 13.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

16.1Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can looked up at <u>www.wikipedia.org.</u>

16.2Training advice

Provide adequate information, instruction and training for operators.

Date: 5/06/2015

The information contained in this SDS is based on data from sources considered to be reliable but Rupert, Gibbon & Spider, Inc. does not guarantee the accuracy or completeness thereof. Rupert, Gibbon & Spider, Inc. urges each customer or recipient of this SDS to study it carefully to become aware of and understand the hazards associated with this product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology or fire and understand the data in this SDS.

This SDS cancels and replaces any preceding release.



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #658 Aztec Gold

Date: 12/19/17

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING

1.1 Product Identifier

Trade name: Pearl Ex #658 Aztec Gold

Trade code: #658

CAS number: 12001-26-2/13463-67-7/1309-37-1

1.2 Relevant identified uses of the substance/mixture and uses advised against

Identified uses: Coloring agent

1.3 Details of the supplier of the safety data sheet

Company Name: Rupert, Gibbon & Spider, Inc. **Address:** 1147 Healdsburg Ave. CA, 95448 **Telephone:** 800-442-0455

1.4 Emergency telephone number

CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300 International CHEMTREC, call: 1-703-527-3887 For non-emergency assistance, call: 800-442-0455

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This substance is not classified as dangerous according to European Union Legislation.

2.2 Label elements

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Pictograms / Symbols: None S-phrase(s) 22 Do not breathe dust.

EC regulation criteria 1272/2008 (CLP):

Precautionary statements: P260 Do not breathe dust. No special labeling needed.

2.3 Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Ingredients	Chemical Name	CAS No.	CI Name	Weight in Percentage (%)
Mica	Mica	12001-26-2	CI 77019	60
TiO ₂	Titanium dioxide	13463-67-7	CI 77891	22
Fe ₂ O ₃	Diiron Trioxide	1309-37-1	CI 77491	18

No components that are liable to disclose according to Regulation (EC) No.1907/2006.

#27103 - JCQRD PEARLEX



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #658 Aztec Gold

Date: 12/19/17

4. FIRST AID MEASURES

4.1 Description of first aid measures

In case of skin contact: Wash off with soap and plenty of water.

In case of eyes contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

In case of Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. In case of Inhalation: Move person to fresh air. Consult doctor in the event of any complaints.

4.2 Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

4.3 Indication of any immediate medical attention and special treatment needed No information available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use extinguishing measures that are in accordance with the local regulations.

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapors.

5.3 Advice for fire-fighters

IN the event of fire, wear self-contained breathing apparatus.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2 Environmental precautions

Don't let product enter drains.

6.3 Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7.2 and 10.5).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

See also section 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Prevent formation of dust



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #658 Aztec Gold

Date: 12/19/17

Any unavoidable deposit of dust must be regularly removed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry, keep packages closed, location away from other material.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific use are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.2 Exposure controls

Eye/face protection: Safety glasses.

Skin protection:

Hand protection: Not required.

Body protection: Protective work clothing.

Other protection: Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled.

Hygiene measures: Change contaminated clothing. Wash hands after working with substance.

Respiratory protection:

Required when dusts are generated.

Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances.

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be

properly documented.

Thermal Hazards: No information available.

Environmental exposure controls: Don't let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:	Powder.
Color:	Pearlescent gold powder
Odor:	Odorless.
Odor threshold:	No information available.
pH:	$5 \sim 9$ (10% aqueous slurry).
Melting point:	No information available.
Boiling point:	No information available.
Solid/gas flammability:	No information available.
Lower explosive limit:	No information available.
Upper explosive limit:	No information available.
Vapor density:	No information available.
Flash point:	Not applicable.

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MSDE for #27103 - JCQRD PEARLEX_PGMNT_



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #658 Aztec Gold

Date: 12/19/17

Evaporation rate:	No information available.				
Vapor pressure:	No information available.				
Relative density:	$2.5 \sim 3.1 \text{g/cm}^3$.				
Solubility in water:	Insoluble.				
Lipid solubility:	Insoluble.				
Partition coefficient					
(n-octanol/water):	No information available.				
Auto-ignition temperature:	No information available.				
Decomposition temperature:	No information available.				
Viscosity:	No information available.				
Explosive properties:	No information available.				
Oxidizing properties:	No information available.				
9.2 Other information					
Bulk density:	$20 \sim 26 \text{ g/100ml}$.				
Particle size:	10-60 μm.				
10. STABILITY AND REACTIVIT	Y				
10.1 Reactivity					
No information available.					
10.2 Chemical stability					
Stable under standard ambie	nt conditions (room temperature).				

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

Not known to date.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

No information available.

11. TOXICOLOGICAL INFORMATION

11.1 Likely routes of exposure:

Skin contact: Wash off with soap and plenty of water.

Eye contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. **Inhalation:** Move person to fresh air. Consult doctor in the event of any complaints.

MSDE TOT 103 - JCQRD PEARLEX PGMNT,



According to Regulation (EC) No.1907/2006

Product	code:	Pearl	Ex	#658	Aztec Gold	
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Date: 12/19/17

11.2 Information on toxicological effects

Aspiration hazard

Based on available data the classification criteria are not met.

Specific target organ toxicity – single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

11.3 Other information

Quantitative data on the toxicity of this product are not available.

Hazardous properties cannot be excluded, but are relatively improbable due to the compound's poor water solubility.

Our own experience has provided no indication of any hazardous potential.

Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions.



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #658 Aztec Gold

Date: 12/19/17

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information available.

- **12.2 Persistence and degradability** No information available.
- **12.3 Bioaccumulative potential** No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Leave chemicals in original containers. Do not mix with other waste.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

Not classified as dangerous in the meaning of transport regulations.

14.2 Sea transport (IMDG-Code/GGVSee)

Not classified as dangerous in the meaning of transport regulations.

14.3 Air transport (ICAO-IATA/DGR)

Not classified as dangerous in the meaning of transport regulations.

14.4 Special Precautions for User

No information available.

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #658 Aztec Gold

Date: 12/19/17

15. REGULATORY INFORMATION

15.1Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Major Accident Hazard Legislation: Directive 96/82/EC does not apply.

National legislation

Storage class: 10 – 13.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

16.1Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can looked up at <u>www.wikipedia.org.</u>

16.2Training advice

Provide adequate information, instruction and training for operators.

Date: 5/06/2015

The information contained in this SDS is based on data from sources considered to be reliable but Rupert, Gibbon & Spider, Inc. does not guarantee the accuracy or completeness thereof. Rupert, Gibbon & Spider, Inc. urges each customer or recipient of this SDS to study it carefully to become aware of and understand the hazards associated with this product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology or fire and understand the data in this SDS.

This SDS cancels and replaces any preceding release.

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SAFETY DATA SHEET

According to Regulation (EC) No.1907/2006 Revision Date 5/6/2015

Version 1.0-2015

Product code: Pearl Ex #659 Antique Gold

1.IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING

1.1 Product Identifier

Trade name: Pearl Ex #659 Antique Gold

Trade code: #659

CAS number: 12001-26-2/13463-67-7/1309-37-1

1.2 Relevant identified uses of the substance/mixture and uses advised against

Identified uses: Coloring Agent

1.3 Details of the supplier of the safety data sheet

Company Name: Rupert, Gibbon & Spider, Inc. **Address:** 1147 Healdsburg Avenue CA, 95448

Telephone: 800-442-0455

1.4 Emergency telephone number

Telephone companies: Poison Control 800-222-1222

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This substance is not classified as dangerous according to European Union Legislation.

2.2 Label elements

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Properties / Symbols: S-phrase(s) 22 Do not breathe dust.

EC regulation criteria 1272/2008 (CLP):

Precautionary statements: P260 Do not breathe dust.

No special labeling needed.

2.3 Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Ingredients	Chemical Name	CAS No.	CI Name	Weight in Percentage (%)
Mica	Mica	12001-26-2	CI 77019	52 ~ 68
TiO ₂	Titanium dioxide	13463-67-7	CI 77891	18 ~ 26
Fe ₂ O ₃	Diiron Trioxide	1309-37-1	CI 77491	14 ~ 22

No components that are liable to disclose according to Regulation (EC) No.1907/2006.

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SAFETY DATA SHEET

According to Regulation (EC) No.1907/2006 Revision Date 5/6/2015

Version 1.0-2015

Product code: Pearl Ex #659 Antique Gold

4. FIRST AID MEASURES

4.1 Description of first aid measures

In case of skin contact: Wash off with soap and plenty of water.

In case of eyes contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

In case of Ingestion: If victim is induce vomiting, give 2-4 cupfuls of water, get medical aid. **In case of Inhalation:** Move person to fresh air. Consult doctor in the event of any complaints.

4.2 Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

4.3 Indication of any immediate medical attention and special treatment needed No information available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use extinguishing measures that are in accordance with the local regulations.

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapours.

5.3 Advice for fire-fighters

IN the event of fire, wear self-contained breathing apparatus.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2 Environmental precautions

Don't let product enter drains.

6.3 Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7.2 and 10.5).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

See also section 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Prevent formation of dust



SAFETY DATA SHEET According to Regulation (EC) No.1907/2006

Revision Date 5/6/2015

Version 1.0-2015

Product code: Pearl Ex #659 Antique Gold

Any unavoidable deposit of dust must be regularly removed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry, keep packages closed, location away from other material.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific use are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.2 Exposure controls

Eye/face protection: Safety glasses.

Skin protection:

Hand protection:Not required.

Body protection: Protective work clothing.

Other protection:Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled.

Hygiene measures: Change contaminated clothing. Wash hands after working with substance.

Respiratory protection:

Required when dusts are generated.

Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances.

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be

properly documented.

Thermal Hazards:No information available.

Environmental exposure controls: Don't let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Powder.
Pearlescent gold powder
Odourless.
No information available.
$5 \sim 9$ (10% aqueous slurry).
No information available.
Not applicable.



Version 1.0-2015

Product code: Pearl Ex #659 Antique Gold

Evaporation rate:	No information available.
Vapour pressure:	No information available.
Relative density:	$2.5 \sim 3.1 \text{g/cm}^3$.
Solubility in water:	Insoluble.
Lipid solubility:	Insoluble.
Partition coefficient	
(n-octanol/water):	No information available.
Auto-ignition temperature:	No information available.
Decomposition temperature:	No information available.
Viscosity:	No information available.
Explosive properties:	No information available.
Oxidizing properties:	No information available.
9.2 Other information	
Bulk density:	$20 \sim 26$ g/100ml.
Particle size:	10-60 μm.

10. STABILITY AND REACTIVITY

10.1 Reactivity

No information available.

10.2 Chemical stability

Stable under standard ambient conditions(room temperature).

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

Not known to date.

10.5 Incompatible materials

No information available. 10.6 Hazardous decomposition products

No information available.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Aspiration hazard

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

SAFETY DATA SHEET According to Regulation (EC) No.1907/2006 Revision Date 5/6/2015

11.2 Other information



SAFETY DATA SHEET According to Regulation (EC) No.1907/2006

Revision Date 5/6/2015

Version 1.0-2015

Product code: Pearl Ex #659 Antique Gold

Quantitative data on the toxicity of this product are not available. Hazardous properties can not be excluded, but are relatively improbable due to the compound's poor water solubility. Our own experience has provided no indication of any hazardous potential. Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ

functions.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information available.

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. Do not mix with other waste.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

Not classified as dangerous in the meaning of transport regulations.

14.2 Sea transport(IMDG-Code/GGVSee)

Not classified as dangerous in the meaning of transport regulations.

14.3 Air transport (ICAO-IATA/DGR)

Not classified as dangerous in the meaning of transport regulations.

14.4 Special Precautions for User

No information available.

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.



SAFETY DATA SHEET According to Regulation (EC) No.1907/2006

Revision Date 5/6/2015

Version 1.0-2015

Product code: Pearl Ex #659 Antique Gold

15. REGULATORY INFORMATION

15.1Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Major Accident Hazard Legislation: Directive 96/82/EC does not apply. **National legislation** Storage class: 10 – 13.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

16.1Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can looked up at <u>www.wikipedia.org.</u>

16.2Training advice

Provide adequate information, instruction and training for operators.

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

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According to Regulation (EC) No.1907/2006 Revision Date 5/6/2015

Product code: Pearl Ex #660 Antique Bronze

Version 1.0-2015

1.IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING

1.1 Product Identifier

Trade name: Pearl Ex #660 Antique Bronze

Trade code: #660

CAS number: 12001-26-2/13463-67-7/1309-37-1

1.2 Relevant identified uses of the substance/mixture and uses advised against

Identified uses: Coloring Agent

1.3 Details of the supplier of the safety data sheet

Company Name: Rupert, Gibbon & Spider, Inc. Address: 1147 Healdsburg Avenue CA, 95448

Telephone: 800-442-0455

1.4 Emergency telephone number

Telephone companies: Poison Control 800-222-1222

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This substance is not classified as dangerous according to European Union Legislation.

2.2 Label elements

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Properties / Symbols: S-phrase(s) 22 Do not breathe dust.

EC regulation criteria 1272/2008 (CLP):

Precautionary statements: P260 Do not breathe dust.

No special labeling needed.

2.3 Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Ingredients	Chemical Name	CAS No.	CI Name	Weight in Percentage (%)
Mica	Mica	12001-26-2	CI 77019	52 ~ 68
TiO ₂	Titanium dioxide	13463-67-7	CI 77891	18 ~ 26
Fe ₂ O ₃	Diiron Trioxide	1309-37-1	CI 77491	14 ~ 22

No components that are liable to disclose according to Regulation (EC) No.1907/2006.

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According to Regulation (EC) No.1907/2006 Revision Date 5/6/2015

Revision Date 5/6/2015

Product code: Pearl Ex #660 Antique Bronze

4. FIRST AID MEASURES

4.1 Description of first aid measures

In case of skin contact: Wash off with soap and plenty of water.

In case of eyes contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

In case of Ingestion: If victim is induce vomiting, give 2-4 cupfuls of water, get medical aid. **In case of Inhalation:** Move person to fresh air. Consult doctor in the event of any complaints.

4.2 Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

4.3 Indication of any immediate medical attention and special treatment needed No information available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use extinguishing measures that are in accordance with the local regulations.

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapours.

5.3 Advice for fire-fighters

IN the event of fire, wear self-contained breathing apparatus.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2 Environmental precautions

Don't let product enter drains.

6.3 Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7.2 and 10.5).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

See also section 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Prevent formation of dust

Version 1.0-2015



According to Regulation (EC) No.1907/2006 Revision Date 5/6/2015

Product code: Pearl Ex #660 Antique Bronze

Version 1.0-2015

Any unavoidable deposit of dust must be regularly removed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry, keep packages closed, location away from other material.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific use are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.2 Exposure controls

Eye/face protection: Safety glasses.

Skin protection:

Hand protection:Not required.

Body protection: Protective work clothing.

Other protection:Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled.

Hygiene measures: Change contaminated clothing. Wash hands after working with substance.

Respiratory protection:

Required when dusts are generated.

Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances.

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be

properly documented.

Thermal Hazards:No information available.

Environmental exposure controls: Don't let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:	Powder.
colour:	Pearlescent brown powder
Odour:	Odourless.
Odour threshold:	No information available.
pH:	$5\sim 9$ (10% aqueous slurry).
Melting point:	No information available.
Boiling point:	No information available.
Solid/gas flammability:	No information available.
Lower explosive limit:	No information available.
Upper explosive limit:	No information available.
Vapour density:	No information available.
Flash point:	Not applicable.



SAFETY DATA SHEET According to Regulation (EC) No.1907/2006

Revision Date 5/6/2015

Product code: Pearl Ex #660 Antique Bronze

No information available. **Evaporation rate:** Vapour pressure: No information available. $2.5 \sim 3.1 \text{g/cm}^3$. **Relative density:** Solubility in water: Insoluble. Insoluble. Lipid solubility: **Partition coefficient** (n-octanol/water): No information available. Auto-ignition temperature: No information available. **Decomposition temperature:** No information available. Viscosity: No information available. **Explosive properties:** No information available. **Oxidizing properties:** No information available. 9.2 Other information Bulk density: 20 ~ 26 g/100ml. 10-60 μm. Particle size:

10. STABILITY AND REACTIVITY

10.1 Reactivity

No information available.

10.2 Chemical stability

Stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

Not known to date.

10.5 Incompatible materials

No information available. **10.6 Hazardous decomposition products**

No information available.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Aspiration hazard

Based on available data the classification criteria are not met.

Specific target organ toxicity – single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

11.2 Other information

Version 1.0-2015



According to Regulation (EC) No.1907/2006 Revision Date 5/6/2015

Product code: Pearl Ex #660 Antique Bronze

Version 1.0-2015

Quantitative data on the toxicity of this product are not available. Hazardous properties can not be excluded, but are relatively improbable due to the compound's poor water solubility. Our own experience has provided no indication of any hazardous potential. Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ

functions.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information available.

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. Do not mix with other waste.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

Not classified as dangerous in the meaning of transport regulations.

14.2 Sea transport(IMDG-Code/GGVSee)

Not classified as dangerous in the meaning of transport regulations.

14.3 Air transport (ICAO-IATA/DGR)

Not classified as dangerous in the meaning of transport regulations.

14.4 Special Precautions for User

No information available.

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.



According to Regulation (EC) No.1907/2006 Revision Date 5/6/2015

Product code: Pearl Ex #660 Antique Bronze

Version 1.0-2015

15. REGULATORY INFORMATION

15.1Safety,health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Major Accident Hazard Legislation: Directive 96/82/EC does not apply. National legislation Storage class: 10 – 13.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

16.1Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can looked up at www.wikipedia.org.

16.2Training advice

Provide adequate information, instruction and training for operators.

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #661 Antique Copper

Date: 12/19/17

1.IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING

1.1 Product Identifier

Trade name: Pearl Ex #661 Antique Copper

Trade code: #661

CAS number: 12001-26-2/13463-67-7/1309-37-1

1.2 Relevant identified uses of the substance/mixture and uses advised against

Identified uses: Coloring Agent

1.3 Details of the supplier of the safety data sheet

Company Name: Rupert, Gibbon & Spider, Inc. **Address:** 1147 Healdsburg Ave. CA, 95448 **Telephone:** 800-442-0455

1.4 Emergency telephone number

CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300 International CHEMTREC, call: 1-703-527-3887 For non-emergency assistance, call: 800-442-0455

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This substance is not classified as dangerous according to European Union Legislation.

2.2 Label elements

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Pictograms / Symbols: None S-phrase(s) 22 Do not breathe dust.

EC regulation criteria 1272/2008 (CLP):

Precautionary statements: P260 Do not breathe dust. No special labeling needed.

2.3 Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Ingredients	Chemical Name	CAS No.	CI Name	Weight in Percentage (%)
Mica	Mica	12001-26-2	CI 77019	61
TiO ₂	Titanium dioxide	13463-67-7	CI 77891	23
Fe ₂ O ₃	Diiron Trioxide	1309-37-1	CI 77491	16
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No components that are liable to disclose according to Regulation (EC) No.1907/2006.



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #661 Antique Copper

4. FIRST AID MEASURES

4.1 Description of first aid measures

In case of skin contact: Wash off with soap and plenty of water.

In case of eyes contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

In case of Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. **In case of Inhalation:** Move person to fresh air. Consult doctor in the event of any complaints.

4.2 Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use extinguishing measures that are in accordance with the local regulations.

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapors.

5.3 Advice for fire-fighters

IN the event of fire, wear self-contained breathing apparatus.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2 Environmental precautions

Don't let product enter drains.

6.3 Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7.2 and 10.5).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

See also section 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Prevent formation of dust

Rupert, Gibbon & Spider, Inc.

Date: 12/19/17



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #661 Antique Copper

Date: 12/19/17

Any unavoidable deposit of dust must be regularly removed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry, keep packages closed, location away from other material.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific use are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.2 Exposure controls

Eye/face protection: Safety glasses.

Skin protection:

Hand protection: Not required.

Body protection: Protective work clothing.

Other protection: Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled.

Hygiene measures: Change contaminated clothing. Wash hands after working with substance.

Respiratory protection:

Required when dusts are generated.

Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances.

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be

properly documented.

Thermal Hazards:No information available.

Environmental exposure controls: Don't let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:	Powder.
Color:	Pearlescent copper powder
Odor:	Odorless.
Odor threshold:	No information available.
pH:	$5 \sim 9$ (10% aqueous slurry).
Melting point:	No information available.
Boiling point:	No information available.
Solid/gas flammability:	No information available.
Lower explosive limit:	No information available.
Upper explosive limit:	No information available.
Vapor density:	No information available.
Flash point:	Not applicable.



According to Regulation (EC) No.1907/2006

Evaporation rate:	No information available.
Vapor pressure:	No information available.
Relative density:	$2.5 \sim 3.1 \text{g/cm}^3$.
Solubility in water:	Insoluble.
Lipid solubility:	Insoluble.
Partition coefficient	
(n-octanol/water):	No information available.
Auto-ignition temperature:	No information available.
Decomposition temperature:	No information available.
Viscosity:	No information available.
Explosive properties:	No information available.
Oxidizing properties:	No information available.
9.2 Other information	
Bulk density:	$20 \sim 26 \text{ g/100ml}.$
Particle size:	10-60 μm.
10. STABILITY AND REACTIVIT	ΥY
10.1 Reactivity	
No information available.	

10.2 Chemical stability

Stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

Not known to date.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

No information available.

11. TOXICOLOGICAL INFORMATION

11.1 Likely routes of exposure:

Skin contact: Wash off with soap and plenty of water.

Eye contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. **Inhalation:** Move person to fresh air. Consult doctor in the event of any complaints.

Date: 12/19/17



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #661 Antique Copper

Date: 12/19/17

11.2 Information on toxicological effects

Aspiration hazard

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

11.3 Other information

Quantitative data on the toxicity of this product are not available.

Hazardous properties cannot be excluded, but are relatively improbable due to the compound's poor water solubility.

Our own experience has provided no indication of any hazardous potential.

Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions.



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #661 Antique Copper

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Date: 12/19/17

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information available.

- **12.2 Persistence and degradability** No information available.
- 12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Leave chemicals in original containers. Do not mix with other waste.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

Not classified as dangerous in the meaning of transport regulations.

14.2 Sea transport (IMDG-Code/GGVSee)

Not classified as dangerous in the meaning of transport regulations.

14.3 Air transport (ICAO-IATA/DGR)

Not classified as dangerous in the meaning of transport regulations.

14.4 Special Precautions for User

No information available.

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.

Item Numbers: 27103-1329



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #661 Antique Copper

15. REGULATORY INFORMATION

15.1Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Major Accident Hazard Legislation: Directive 96/82/EC does not apply.

National legislation

Storage class: 10 – 13.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

16.1Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can looked up at www.wikipedia.org.

16.2Training advice

Provide adequate information, instruction and training for operators.

Date: 5/06/2015

The information contained in this SDS is based on data from sources considered to be reliable but Rupert, Gibbon & Spider, Inc. does not guarantee the accuracy or completeness thereof. Rupert, Gibbon & Spider, Inc. urges each customer or recipient of this SDS to study it carefully to become aware of and understand the hazards associated with this product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology or fire and understand the data in this SDS.

This SDS cancels and replaces any preceding release.

Date: 12/19/17



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #662 Antique Silver

Date: 12/19/17

1.IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING

1.1 Product Identifier

Trade name: Pearl Ex #662 Antique Silver

Trade code: #662

CAS number: 12001-26-2/13463-67-7/1333-86-4

1.2 Relevant identified uses of the substance/mixture and uses advised against

Identified uses: Coloring Agent

1.3 Details of the supplier of the safety data sheet

Company Name: Rupert, Gibbon & Spider, Inc. **Address:** 1147 Healdsburg Ave. CA, 95448 **Telephone:** 800-442-0455

1.4 Emergency telephone number

CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300 International CHEMTREC, call: 1-703-527-3887 For non-emergency assistance, call: 800-442-0455

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This substance is not classified as dangerous according to European Union Legislation.

2.2 Label elements

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Pictograms / Symbols: None S-phrase(s) 22 Do not breathe dust.

EC regulation criteria 1272/2008 (CLP):

Precautionary statements: P260 Do not breathe dust. No special labeling needed.

2.3 Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Ingredients	Chemical Name	CAS No.	CI Name	Weight in Percentage (%)
Mica	Mica	12001-26-2	CI 77019	72
TiO ₂	Titanium dioxide	13463-67-7	CI 77891	27
Pigment black 7	Pigment black 7	1333-86-4	CI 77266	≤1

No components that are liable to disclose according to Regulation (EC) No.1907/2006.

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According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #662 Antique Silver

4. FIRST AID MEASURES

4.1 Description of first aid measures

In case of skin contact: Wash off with soap and plenty of water.

In case of eyes contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

In case of Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. **In case of Inhalation:** Move person to fresh air. Consult doctor in the event of any complaints.

4.2 Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use extinguishing measures that are in accordance with the local regulations.

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapors.

5.3 Advice for fire-fighters

IN the event of fire, wear self-contained breathing apparatus.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2 Environmental precautions

Don't let product enter drains.

6.3 Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7.2 and 10.5).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

See also section 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Prevent formation of dust

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Date: 12/19/17



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #662 Antique Silver

Date: 12/19/17

Any unavoidable deposit of dust must be regularly removed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry, keep packages closed, location away from other material.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific use are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.2 Exposure controls

Eye/face protection: Safety glasses.

Skin protection:

Hand protection: Not required.

Body protection: Protective work clothing.

Other protection: Protective clothing needs to be selected specifically for the workplace,

depending on concentrations and quantities of the hazardous substances handled.

Hygiene measures: Change contaminated clothing. Wash hands after working with substance.

Respiratory protection:

Required when dusts are generated.

Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances.

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective

devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Thermal Hazards: No information available.

Environmental exposure controls: Don't let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

1 5	
Appearance:	Powder.
Color:	Pearlescent silver powder
Odor:	Odorless.
Odor threshold:	No information available.
pH:	$5 \sim 9$ (10% aqueous slurry).
Melting point:	No information available.
Boiling point:	No information available.
Solid/gas flammability:	No information available.
Lower explosive limit:	No information available.
Upper explosive limit:	No information available.
Vapor density:	No information available.

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SAFETY DATA SHEET

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #662 Antique Silver

Flash point:

Not applicable.

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Item Numbers: 27103-1329

Rupert, Gibbon & Spider, Inc.

Date: 12/19/17



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #662 Antique Silver

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Date: 12/19/17

Evaporation rate:	No information available.
Vapor pressure:	No information available.
Relative density:	$2.4 \sim 3.0 \text{ g/cm}^3$.
Solubility in water:	Insoluble.
Lipid solubility:	Insoluble.
Partition coefficient	
(n-octanol/water):	No information available.
Auto-ignition temperature:	No information available.
Decomposition temperature:	No information available.
Viscosity:	No information available.
Explosive properties:	No information available.
Oxidizing properties:	No information available.
9.2 Other information	
Bulk density:	17~ 23 g/100ml.
Particle size:	10-60 μm.
10. STABILITY AND REACTIVIT	v
10.1 Reactivity	
No information available.	
10.2 Chemical stability	
Stable under standard ambier	nt conditions(room temperature).
10.3 Possibility of hazardous re	
No information available.	
10.4 Conditions to avoid	
Not known to date.	
10.5 Incompatible materials	

No information available.

10.6 Hazardous decomposition products

No information available.

11. TOXICOLOGICAL INFORMATION

11.1 Likely routes of exposure:

Skin contact: Wash off with soap and plenty of water.
Eye contact: Immediately flush with plenty of water about 15 minutes. If discomfort persists, get medical aid.
Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid.
Inhalation: Move person to fresh air. Consult doctor in the event of any complaints.

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According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #662 Antique Silver

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Date: 12/19/17

11.2 Information on toxicological effects

Aspiration hazard

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

11.2 Other information

Quantitative data on the toxicity of this product are not available.

Hazardous properties cannot be excluded, but are relatively improbable due to the compound's poor water solubility.

Our own experience has provided no indication of any hazardous potential.

Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions.

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Item Numbers: 27103-1329



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #662 Antique Silver

Date: 12/19/17

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information available.

12.2 Persistence and degradability No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Leave chemicals in original containers. Do not mix with other waste.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

Not classified as dangerous in the meaning of transport regulations.

14.2 Sea transport (IMDG-Code/GGVSee)

Not classified as dangerous in the meaning of transport regulations.

14.3 Air transport (ICAO-IATA/DGR)

Not classified as dangerous in the meaning of transport regulations.

14.4 Special Precautions for User

No information available.

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #662 Antique Silver

Date: 12/19/17

15. REGULATORY INFORMATION

15.1Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Major Accident Hazard Legislation: Directive 96/82/EC does not apply.

National legislation

Storage class: 10 – 13.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

16.1Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can looked up at <u>www.wikipedia.org.</u>

16.2Training advice

Provide adequate information, instruction and training for operators.

Date: 5/06/2015

The information contained in this SDS is based on data from sources considered to be reliable but Rupert, Gibbon & Spider, Inc. does not guarantee the accuracy or completeness thereof. Rupert, Gibbon & Spider, Inc. urges each customer or recipient of this SDS to study it carefully to become aware of and understand the hazards associated with this product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology or fire and understand the data in this SDS.

This SDS cancels and replaces any preceding release.

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Item Numbers: 27103-1329

Rupert, Gibbon & Spider, Inc.

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According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #663 Silver

Date: 12/19/17

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING

1.1 Product Identifier

Trade name: Pearl Ex #663 Silver

Trade code: #663

CAS number: 12001-26-2/13463-67-7/1333-86-4

1.2 Relevant identified uses of the substance/mixture and uses advised against

Identified uses: Coloring Agent

1.3 Details of the supplier of the safety data sheet

Company Name: Rupert, Gibbon & Spider, Inc. **Address:** 1147 Healdsburg Ave. CA, 95448 **Telephone:** 800-442-0455

1.4 Emergency telephone number

CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300 International CHEMTREC, call: 1-703-527-3887 For non-emergency assistance, call: 800-442-0455

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This substance is not classified as dangerous according to European Union Legislation.

2.2 Label elements

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Pictograms / Symbols: None S-phrase(s) 22 Do not breathe dust.

EC regulation criteria 1272/2008 (CLP):

Precautionary statements: P260 Do not breathe dust. No special labeling needed.

2.3 Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Ingredients	Chemical Name	CAS No.	CI Name	Weight in Percentage (%)
Mica	Mica	12001-26-2	CI 77019	72
TiO ₂	Titanium dioxide	13463-67-7	CI 77891	27
Pigment black 7	Pigment black 7	1333-86-4	CI 77266	≤ 1

No components that are liable to disclose according to Regulation (EC) No.1907/2006.

Item Numbers: 27103-1329

Rupert, Gibbon & Spider, Inc.



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #663 Silver

4. FIRST AID MEASURES

4.1 Description of first aid measures

In case of skin contact: Wash off with soap and plenty of water.

In case of eyes contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

In case of Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. **In case of Inhalation:** Move person to fresh air. Consult doctor in the event of any complaints.

4.2 Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use extinguishing measures that are in accordance with the local regulations.

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapors.

5.3 Advice for fire-fighters

IN the event of fire, wear self-contained breathing apparatus.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2 Environmental precautions

Don't let product enter drains.

6.3 Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7.2 and 10.5).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

See also section 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Prevent formation of dust

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Date: 12/19/17



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #663 Silver

Date: 12/19/17

Any unavoidable deposit of dust must be regularly removed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry, keep packages closed, location away from other material.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific use are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.2 Exposure controls

Eye/face protection: Safety glasses.

Skin protection:

Hand protection: Not required.

Body protection: Protective work clothing.

Other protection: Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled.

Hygiene measures: Change contaminated clothing. Wash hands after working with substance.

Respiratory protection:

Required when dusts are generated.

Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances.

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be

properly documented.

Thermal Hazards:No information available.

Environmental exposure controls: Don't let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

1 0	. .
Appearance:	Powder.
Color:	Pearlescent silver powder
Odor:	Odorless.
Odor threshold:	No information available.
pH:	$5 \sim 9$ (10% aqueous slurry).
Melting point:	No information available.
Boiling point:	No information available.
Solid/gas flammability:	No information available.
Lower explosive limit:	No information available.
Upper explosive limit:	No information available.
Vapor density:	No information available.

MSDS for #27103 - JCQRD PEARLEX PGMNT



SAFETY DATA SHEET According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #663 Silver

Flash point:

Not applicable.

Item Numbers: 27103-1329

Rupert, Gibbon & Spider, Inc.

Date: 12/19/17



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #663 Silver

Date: 12/19/17

Evaporation rate:	No information available.
Vapor pressure:	No information available.
Relative density:	$2.4 \sim 3.0 \text{ g/cm}^3$.
Solubility in water:	Insoluble.
Lipid solubility:	Insoluble.
Partition coefficient	
(n-octanol/water):	No information available.
Auto-ignition temperature:	No information available.
Decomposition temperature:	No information available.
Viscosity:	No information available.
Explosive properties:	No information available.
Oxidizing properties:	No information available.
9.2 Other information	
Bulk density:	17~ 23 g/100ml.
Particle size:	10-60 μm.
10. STABILITY AND REACTIVIT	Y
10.1 Reactivity	
No information available.	
10.2 Chemical stability	
Stable under standard ambier	nt conditions (room temperature).
10.3 Possibility of hazardous re	eactions
No information available.	
10.4 Conditions to avoid	
Not known to date.	
not known to date.	
10.5 Incompatible materials	
10.5 Incompatible materials	products

Eye contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. **Inhalation:** Move person to fresh air. Consult doctor in the event of any complaints.



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #663 Silver

Date: 12/19/17

11.1 Information on toxicological effects

Aspiration hazard

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

11.2 Other information

Quantitative data on the toxicity of this product are not available.

Hazardous properties cannot be excluded, but are relatively improbable due to the compound's poor water solubility.

Our own experience has provided no indication of any hazardous potential.

Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions.



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #663 Silver

Date: 12/19/17

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information available.

12.2 Persistence and degradability No information available.

12.3 Bioaccumulative potential No information available.

No mormation availa

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Leave chemicals in original containers. Do not mix with other waste.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

Not classified as dangerous in the meaning of transport regulations.

14.2 Sea transport (IMDG-Code/GGVSee)

Not classified as dangerous in the meaning of transport regulations.

14.3 Air transport (ICAO-IATA/DGR)

Not classified as dangerous in the meaning of transport regulations.

14.4 Special Precautions for User

No information available.

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #663 Silver

15. REGULATORY INFORMATION

15.1Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Major Accident Hazard Legislation: Directive 96/82/EC does not apply.

National legislation

Storage class: 10 – 13.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

16.1Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can looked up at www.wikipedia.org.

16.2Training advice

Provide adequate information, instruction and training for operators.

Date: 5/06/2015

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This SDS cancels and replaces any preceding release.

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Date: 12/19/17



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #664 Super Bronze

Date: 12/19/17

1.IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING

1.1 Product Identifier

Trade name: Pearl Ex #664 Super Bronze

Trade code: #664

CAS number: 12001-26-2/1309-37-1

1.2 Relevant identified uses of the substance/mixture and uses advised against

Identified uses: Coloring Agent

1.3 Details of the supplier of the safety data sheet

Company Name: Rupert, Gibbon & Spider, Inc. **Address:** 1147 Healdsburg Ave. CA, 95448 **Telephone:** 800-442-0455

1.4 Emergency telephone number

CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300 International CHEMTREC, call: 1-703-527-3887 For non-emergency assistance, call: 800-442-0455

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This substance is not classified as dangerous according to European Union Legislation.

2.2 Label elements

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Pictograms / Symbols: None S-phrase(s) 22 Do not breathe dust.

EC regulation criteria 1272/2008 (CLP):

Precautionary statements: P260 Do not breathe dust. No special labeling needed.

2.3 Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Ingredients	Chemical Name	CAS No.	CI Name	Weight in Percentage (%)
Mica	Mica	12001-26-2	CI 77019	64
Fe ₂ O ₃	Diiron Trioxide	1309-37-1	CI 77491	36

No components that are liable to disclose according to Regulation (EC) No.1907/2006.

-Rupert, Gibbon & Spider, Inc. -

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According to Regulation (EC) No.1907/2006

Date: 12/19/17

Product code: Pearl Ex #664 Super Bronze

4. FIRST AID MEASURES

4.1 Description of first aid measures

In case of skin contact: Wash off with soap and plenty of water.

In case of eyes contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

In case of Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. **In case of Inhalation:** Move person to fresh air. Consult doctor in the event of any complaints.

4.2 Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use extinguishing measures that are in accordance with the local regulations. For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapours.

5.3 Advice for fire-fighters

IN the event of fire, wear self-contained breathing apparatus. Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2 Environmental precautions

Don't let product enter drains.

6.3 Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7.2 and 10.5).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

See also section 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Prevent formation of dust



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #664 Super Bronze

Date: 12/19/17

Any unavoidable deposit of dust must be regularly removed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry, keep packages closed, location away from other material.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific use are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.2 Exposure controls

Eye/face protection: Safety glasses.

Skin protection:

Hand protection: Not required.

Body protection: Protective work clothing.

Other protection: Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled.

Hygiene measures: Change contaminated clothing. Wash hands after working with substance.

Respiratory protection:

Required when dusts are generated.

Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances.

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be

properly documented.

Thermal Hazards: No information available.

Environmental exposure controls: Don't let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

1 5	
Appearance:	Powder.
Color:	Pearlescent bronze powder
Odor:	Odorless.
Odor threshold:	No information available.
pH:	$5 \sim 9$ (10% aqueous slurry).
Melting point:	No information available.
Boiling point:	No information available.
Solid/gas flammability:	No information available.
Lower explosive limit:	No information available.
Upper explosive limit:	No information available.
Vapor density:	No information available.

Rupert, Gibbon & Spider, Inc.

MSDS for #27103 - JCQRD PEARLEX PGMNT



SAFETY DATA SHEET

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #664 Super Bronze

Flash point:

Not applicable.

Date: 12/19/17

MSDS for #27103 - JCQRD PEARLEX PGMNT



SAFETY DATA SHEET

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #664 Super Bronze	
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Evaporation rate: Vapor pressure: Relative density:	No information available. No information available. $2.6 \sim 3.2 \text{ g/cm}^3$.	
Solubility in water:	Insoluble.	
Lipid solubility:	Insoluble.	
Partition coefficient		
(n-octanol/water):	No information available.	
Auto-ignition temperature:	No information available.	
Decomposition temperature:	No information available.	
Viscosity:	No information available.	
Explosive properties:	No information available.	
Oxidizing properties:	No information available.	
9.2 Other information		
Bulk density:	20 ~ 26 g/100ml	
Particle size:	$10 \sim 60 \ \mu m.$	
10. STABILITY AND REACTIVITY	Y	
10.1 Reactivity		
No information available.		
10.2 Chemical stability		
Stable under standard ambier	nt conditions(room temperature).	
10.3 Possibility of hazardous re	actions	
No information available.		
10.4 Conditions to avoid		
Not known to date.		
10.5 Incompatible materials		
No information available.		
10.6 Hazardous decomposition products		
No information available.		
 11. TOXICOLOGICAL INFORMATION 11.1 Likely routes of exposure: Skin contact: Wash off with soap and plenty of water. 		

Eye contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. **Inhalation:** Move person to fresh air. Consult doctor in the event of any complaints.

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Date: 12/19/17



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #664 Super Bronze

Date: 12/19/17

11.1 Information on toxicological effects

Aspiration hazard

Based on available data the classification criteria are not met.

Specific target organ toxicity – single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

11.2 Other information

Quantitative data on the toxicity of this product are not available. Hazardous properties cannot be excluded, but are relatively improbable due to the compound's poor water solubility.

Our own experience has provided no indication of any hazardous potential.

Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions.

Item Numbers: 27103-1329

Product code: Pearl Ex #664 Super Bronze



SAFETY DATA SHEET

According to Regulation (EC) No.1907/2006

Date: 12/19/17

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information available.

12.2 Persistence and degradability No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Rupert, Gibbon & Spider, Inc.

Leave chemicals in original containers. Do not mix with other waste.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

Not classified as dangerous in the meaning of transport regulations.

14.2 Sea transport (IMDG-Code/GGVSee)

Not classified as dangerous in the meaning of transport regulations.

14.3 Air transport (ICAO-IATA/DGR)

Not classified as dangerous in the meaning of transport regulations.

14.4 Special Precautions for User

No information available.

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #664 Super Bronze

Date: 12/19/17

15. REGULATORY INFORMATION

15.1Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Major Accident Hazard Legislation: Directive 96/82/EC does not apply.

National legislation

Storage class: 10 – 13.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

16.1Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can looked up at <u>www.wikipedia.org.</u>

16.2Training advice

Provide adequate information, instruction and training for operators.

Date: 5/06/2015

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This SDS cancels and replaces any preceding release.



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #665 Sunset Gold

Date: 12/19/17

1.IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING

1.1 Product Identifier

Trade name: Pearl Ex #665 Sunset Gold

Trade code: #665

CAS number: 12001-26-2/13463-67-7/1309-37-1

1.2 Relevant identified uses of the substance/mixture and uses advised against

Identified uses: Coloring Agent

1.3 Details of the supplier of the safety data sheet

Company Name: Rupert, Gibbon & Spider, Inc. **Address:** 1147 Healdsburg Ave. CA, 95448 **Telephone:** 800-442-0455

1.4 Emergency telephone number

CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300 International CHEMTREC, call: 1-703-527-3887 For non-emergency assistance, call: 800-442-0455

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This substance is not classified as dangerous according to European Union Legislation.

2.2 Label elements

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Pictograms / Symbols: None S-phrase(s) 22 Do not breathe dust.

EC regulation criteria 1272/2008 (CLP):

Precautionary statements: P260 Do not breathe dust. No special labeling needed.

2.3 Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Ingredients	Chemical Name	CAS No.	CI Name	Weight in Percentage (%)
Mica	Mica	12001-26-2	CI 77019	62
TiO ₂	Titanium dioxide	13463-67-7	CI 77891	23
Fe ₂ O ₃	Diiron Trioxide	1309-37-1	CI 77491	15

No components that are liable to disclose according to Regulation (EC) No.1907/2006.

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According to Regulation (EC) No.1907/2006

Date: 12/19/17

Product code: Pearl Ex #665 Sunset Gold

4. FIRST AID MEASURES

4.1 Description of first aid measures

In case of skin contact: Wash off with soap and plenty of water.

In case of eyes contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

In case of Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. In case of Inhalation: Move person to fresh air. Consult doctor in the event of any complaints.

4.2 Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use extinguishing measures that are in accordance with the local regulations.

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapors.

5.3 Advice for fire-fighters

IN the event of fire, wear self-contained breathing apparatus.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2 Environmental precautions

Don't let product enter drains.

6.3 Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7.2 and 10.5).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

See also section 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Prevent formation of dust



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #665 Sunset Gold

Date: 12/19/17

Any unavoidable deposit of dust must be regularly removed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry, keep packages closed, location away from other material.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific use are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.2 Exposure controls

Eye/face protection: Safety glasses.

Skin protection:

Hand protection: Not required.

Body protection: Protective work clothing.

Other protection: Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled.

Hygiene measures: Change contaminated clothing. Wash hands after working with substance.

Respiratory protection:

Required when dusts are generated.

Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances.

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be

properly documented.

Thermal Hazards: No information available.

Environmental exposure controls: Don't let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:	Powder.
Color:	Pearlescent brown powder
Odor:	Odorless.
Odor threshold:	No information available.
pH:	$5 \sim 9$ (10% aqueous slurry).
Melting point:	No information available.
Boiling point:	No information available.
Solid/gas flammability:	No information available.
Lower explosive limit:	No information available.
Upper explosive limit:	No information available.
Vapor density:	No information available.
Flash point:	Not applicable.

Rupert, Gibbon & Spider, Inc.

MSDS for #27103 - JCQRD PEARLEX PGMNT



SAFETY DATA SHEET

According to Regulation (EC) No.1907/2006

Evaporation rate:	No information available.		
Vapor pressure:	No information available.		
Relative density:	$2.5 \sim 3.1 \text{g/cm}^3$.		
Solubility in water:	Insoluble.		
Lipid solubility:	Insoluble.		
Partition coefficient			
(n-octanol/water):	No information available.		
Auto-ignition temperature:	No information available.		
Decomposition temperature:	No information available.		
Viscosity:	No information available.		
Explosive properties:	No information available.		
Oxidizing properties:	No information available.		
9.2 Other information			
Bulk density:	$20 \sim 26 \text{ g/100ml}$.		
Particle size:	10-60 μm.		
10. STABILITY AND REACTIVITY	ζ		
10.1 Reactivity			
No information available.			
10.2 Chemical stability			
Stable under standard ambient conditions (room temperature).			
10.3 Possibility of hazardous reactions			

No information available.

10.4 Conditions to avoid

Not known to date.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

No information available.

11. TOXICOLOGICAL INFORMATION

11.1 Likely routes of exposure:

Skin contact: Wash off with soap and plenty of water.

Eye contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. **Inhalation:** Move person to fresh air. Consult doctor in the event of any complaints.

4

Date: 12/19/17



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #665 Sunset Gold

Date: 12/19/17

11.2 Information on toxicological effects

Aspiration hazard

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

11.3 Other information

Quantitative data on the toxicity of this product are not available.

Hazardous properties cannot be excluded, but are relatively improbable due to the compound's poor water solubility.

Our own experience has provided no indication of any hazardous potential.

Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions.



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #665 Sunset Gold

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Date: 12/19/17

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information available.

- **12.2 Persistence and degradability** No information available.
- **12.3 Bioaccumulative potential** No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Leave chemicals in original containers. Do not mix with other waste.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

Not classified as dangerous in the meaning of transport regulations.

14.2 Sea transport (IMDG-Code/GGVSee)

Not classified as dangerous in the meaning of transport regulations.

14.3 Air transport (ICAO-IATA/DGR)

Not classified as dangerous in the meaning of transport regulations.

14.4 Special Precautions for User

No information available.

$14.5\ Transport$ in bulk according to Annex II of MARPOL $73/78\ and$ the IBC Code

Not relevant.



According to Regulation (EC) No.1907/2006

Date: 12/19/17

Product code: Pearl Ex #665 Sunset Gold

15. REGULATORY INFORMATION

15.1Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Major Accident Hazard Legislation: Directive 96/82/EC does not apply.

National legislation

Storage class: 10 – 13.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

16.1Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can looked up at <u>www.wikipedia.org.</u>

16.2Training advice

Provide adequate information, instruction and training for operators.

Date: 5/06/2015

The information contained in this SDS is based on data from sources considered to be reliable but Rupert, Gibbon & Spider, Inc. does not guarantee the accuracy or completeness thereof. Rupert, Gibbon & Spider, Inc. urges each customer or recipient of this SDS to study it carefully to become aware of and understand the hazards associated with this product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology or fire and understand the data in this SDS.

This SDS cancels and replaces any preceding release.



According to Regulation (EC) No.1907/2006

Product: Pearl Ex Pigments 670 Interference Red Revision Date 5/6/2015 Version 1.0-2012

1.IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier

Trade name: Pearl Ex Pigments 670 Interference Red

Trade code: KW120

CAS number: 12001-26-2/13463-67-7

1.2 Relevant identified uses of the substance/mixture and uses advised against

Identified uses: Coloring agent

1.3 Details of the supplier of the safety data sheet

Company Name: Address:	Rupert, Gibbon & Spider, Inc. 1147 Healdsburg Avenue, Healdsburg CA 95448	
Telephone:	800-442-0455	
Email:	service@jacquardproducts.com	

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This substance is not classified as dangerous according to European Union Legislation.

2.2 Label elements

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Properties / Symbols: S-phrase(s) 22 Do not breathe dust.

EC regulation criteria 1272/2008 (CLP):

Precautionary statements: P260 Do not breathe dust.

The product does not need to be labeled in accordance with EC directives or respective national laws.

2.3 Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Ingredients	Chemical Name	CAS No.	CI Name	Weight in Percentage (%)
Mica	Mica	12001-26-2	CI 77019	43 ~ 60
TiO ₂	Titanium dioxide	13463-67-7	CI 77891	$40 \sim 57$

No components that are liable to disclose according to Regulation (EC) No.1907/2006.



According to Regulation (EC) No.1907/2006

Version 1.0-2012 Product: Pearl Ex Pigments 670 Interference Red Revision Date 5/6/2015

4. FIRST AID MEASURES

4.1 Description of first aid measures

In case of skin contact: Wash off with soap and plenty of water.

In case of eyes contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

In case of Ingestion: If victim is induce vomiting, give 2-4 cupfuls of water, get medical aid. In case of Inhalation: Move person to fresh air. Consult doctor in the event of any complaints.

4.2 Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

4.3 Indication of any immediate medical attention and special treatment needed No information available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapours.

5.3 Advice for fire-fighters

IN the event of fire, wear self-contained breathing apparatus.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2 Environmental precautions

Don't let product enter drains.

6.3 Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7.2 and 10.5).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

See also section 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Prevent formation of dust



According to Regulation (EC) No.1907/2006

Product: Pearl Ex Pigments 670 Interference Red Revision Date 5/6/2015 Version 1.0-2012

Any unavoidable deposit of dust must be regularly removed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry, keep packages closed, location away from other material.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific use are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.2 Exposure controls

Eye/face protection: Safety glasses.

Skin protection:

Hand protection:Not required.

Body protection: Protective work clothing.

Other protection:Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled.

Hygiene measures: Change contaminated clothing. Wash hands after working with substance.

Respiratory protection:

Required when dusts are generated.

Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances.

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be

properly documented.

Thermal Hazards: No information available.

Environmental exposure controls: Don't let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

I J	I I
Appearance:	Powder.
colour:	White reflection with luser.
Odour:	Odourless.
Odour threshold:	No information available.
pH:	$5\sim 9$ (10% aqueous slurry).
Melting point:	No information available.
Boiling point:	No information available.
Solid/gas flammability:	No information available.
Lower explosive limit:	No information available.
Upper explosive limit:	No information available.
Vapour density:	No information available.
Flash point:	Not applicable.

Rupert, Gibbon & Spider, Inc.

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According to Regulation (EC) No.1907/2006

Product: Pearl Ex Pigments 670	Interference Red	Revision Date 5/6/2015	Version 1.0-2012
Evaporation rate:	No information av	ailable.	
Vapour pressure:	No information av	ailable.	
Relative density:	$2.4 \sim 3.0 \text{ g/cm}^3$.		
Solubility in water:	Insoluble.		
Lipid solubility:	Insoluble.		
Partition coefficient			
(n-octanol/water):	No information	available.	
Auto-ignition temperature:	No information	available.	
Decomposition temperature:	No information	available.	
Viscosity:	No information	available.	
Explosive properties:	No information	available.	
Oxidizing properties:	No information ava	ailable.	
9.2 Other information			
Bulk density:	15 ~ 21 g/100ml.		
Particle size:	5-25 μm.		
 10.3 Possibility of hazardous reaction of the information available. 10.4 Conditions to avoid Not known to date. 10.5 Incompatible materials No information available. 10.6 Hazardous decomposition No information available. 			
 11. TOXICOLOGICAL INFORMAT 11.1 Information on toxicologi Aspiration hazard Based on available data the c Specific target organ toxici The substance or mixture is Specific target organ toxici The substance or mixture is 	cal effects lassification criteria a i ty – single exposure not classified as spec i ty – repeated expos	e ific target organ toxicant, s sure	
11.2 Other information			
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According to Regulation (EC) No.1907/2006

Product: Pearl Ex Pigments 670 Interference Red Revision Date 5/6/2015 Version 1.0-2012

Quantitative data on the toxicity of this product are not available. Hazardous properties cannot be excluded, but are relatively improbable due to the compound's poor water solubility.

Our own experience has provided no indication of any hazardous potential. Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ

functions.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information available.

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Leave chemicals in original containers. No mixing with other waste.

Handle uncleaned containers like the product itself.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

Not classified as dangerous in the meaning of transport regulations.

14.2 Sea transport(IMDG-Code/GGVSee)

Not classified as dangerous in the meaning of transport regulations.

14.3 Air transport (ICAO-IATA/DGR)

Not classified as dangerous in the meaning of transport regulations.

14.4 Special Precautions for User

No information available.

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.

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According to Regulation (EC) No.1907/2006

Product: Pearl Ex Pigments 670 Interference Red Revision Date 5/6/2015 Version 1.0-2012

15. REGULATORY INFORMATION

15.1Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Major Accident Hazard Legislation: Directive 96/82/EC does not apply.

National legislation

Storage class: 10 – 13.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

16.1Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can looked up at www.wikipedia.org.

16.2Training advice

Provide adequate information, instruction and training for operators.

16.3Further information

For more information contact product safety at ZHEJIANG RUICHENG EFFECT PIGMENT CO., LTD +86-577-63662878

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.



SAFETY DATA SHEET According to Regulation (EC) No.1907/2006

Revision Date 5/6/2015

Product: Pearl Ex #671 Interference Blue

Version 1.0-2015

1.IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING

1.1 Product Identifier

Trade name: Pearl Ex #671 Interference Blue

Trade code: #671

CAS number: 12001-26-2/13463-67-7

1.2 Relevant identified uses of the substance/mixture and uses advised against

Identified uses: Coloring agent

1.3 Details of the supplier of the safety data sheet

Company Name:	Rupert, Gibbon & Spider, Inc.	
Address:	1147 Healdsburg Avenue, Healdsburg CA 95448	
Telephone:	800-442-0455	
Email:	service@jacquardproducts.com	

1.4 Emergency telephone number

Telephone companies: Poison Control 800-222-1222

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This substance is not classified as dangerous according to European Union Legislation.

2.2 Label elements

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Properties / Symbols: S-phrase(s) 22 Do not breathe dust.

EC regulation criteria 1272/2008 (CLP):

Precautionary statements: P260 Do not breathe dust.

No special labeling needed.

2.3 Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Ingredients	Chemical Name	CAS No.	CI Name	Weight in Percentage (%)
Mica	Mica	12001-26-2	CI 77019	43 ~ 60
TiO ₂	Titanium dioxide	13463-67-7	CI 77891	40 ~ 57

No components that are liable to disclose according to Regulation (EC) No.1907/2006.

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Y DATA SHEET According to Regulation (EC) No.1907/2006

Revision Date 5/6/2015

Product: Pearl Ex #671 Interference Blue

4. FIRST AID MEASURES

4.1 Description of first aid measures

In case of skin contact: Wash off with soap and plenty of water.

In case of eyes contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

In case of Ingestion: If victim is induce vomiting, give 2-4 cupfuls of water, get medical aid. In case of Inhalation: Move person to fresh air. Consult doctor in the event of any complaints.

4.2 Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

4.3 Indication of any immediate medical attention and special treatment needed No information available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use extinguishing measures that are in accordance with the local regulations.

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapours.

5.3 Advice for fire-fighters

IN the event of fire, wear self-contained breathing apparatus.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2 Environmental precautions

Don't let product enter drains.

6.3 Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7.2 and 10.5).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

See also section 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Prevent formation of dust

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SAFETY DATA SHEET According to Regulation (EC) No.1907/2006 Revision Date 5/6/2015

Product: Pearl Ex #671 Interference Blue

Version 1.0-2015

Any unavoidable deposit of dust must be regularly removed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry, keep packages closed, location away from other material.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific use are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.2 Exposure controls

Eye/face protection: Safety glasses.

Skin protection:

Hand protection:Not required.

Body protection: Protective work clothing.

Other protection:Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled.

Hygiene measures: Change contaminated clothing. Wash hands after working with substance.

Respiratory protection:

Required when dusts are generated.

Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances.

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be

properly documented.

Thermal Hazards: No information available.

Environmental exposure controls: Don't let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

1 1	
Appearance:	Powder.
colour:	White reflection with luser.
Odour:	Odourless.
Odour threshold:	No information available.
pH:	$5\sim 9$ (10% aqueous slurry).
Melting point:	No information available.
Boiling point:	No information available.
Solid/gas flammability:	No information available.
Lower explosive limit:	No information available.
Upper explosive limit:	No information available.
Vapour density:	No information available.
Flash point:	Not applicable.

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MSDS to



Evaporation rate:

Vapour pressure: **Relative density:**

Lipid solubility:

According to Regulation (EC) No.1907/2006 Revision Date 5/6/2015 Product: Pearl Ex #671 Interference Blue No information available. No information available. $2.4 \sim 3.0 \text{ g/cm}^3$. Solubility in water: Insoluble. Insoluble.

FY DATA SHEET

Partition coefficient	
(n-octanol/water):	No information available.
Auto-ignition temperature:	No information available.
Decomposition temperature:	No information available.
Viscosity:	No information available.
Explosive properties:	No information available.
Oxidizing properties:	No information available.
9.2 Other information	
Bulk density:	15 ~ 21 g/100ml.
Particle size:	5-25 μm.

10. STABILITY AND REACTIVITY

10.1 Reactivity

No information available.

10.2 Chemical stability

Stable under standard ambient conditions(room temperature).

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

Not known to date.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

No information available.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Aspiration hazard

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

11.2 Other information

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Y DATA SHEET According to Regulation (EC) No.1907/2006 Revision Date 5/6/2015

Product: Pearl Ex #671 Interference Blue

Version 1.0-2015

Quantitative data on the toxicity of this product are not available. Hazardous properties cannot be excluded, but are relatively improbable due to the compound's poor water solubility. Our own experience has provided no indication of any hazardous potential. Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ

functions.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information available.

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Leave chemicals in original containers. Do not mix with other waste.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

Not classified as dangerous in the meaning of transport regulations.

14.2 Sea transport(IMDG-Code/GGVSee)

Not classified as dangerous in the meaning of transport regulations.

14.3 Air transport (ICAO-IATA/DGR)

Not classified as dangerous in the meaning of transport regulations.

14.4 Special Precautions for User

No information available.

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.

MSDS for #27103 - JCQRD PEARLEX PGMNT



SAFETY DATA SHEET According to Regulation (EC) No.1907/2006 Revision Date 5/6/2015

Revision Date 5/0/20

Product: Pearl Ex #671 Interference Blue

Version 1.0-2015

15. REGULATORY INFORMATION

15.1Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Major Accident Hazard Legislation: Directive 96/82/EC does not apply. **National legislation** Storage class: 10 – 13.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

16.1Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can looked up at <u>www.wikipedia.org.</u>

16.2Training advice

Provide adequate information, instruction and training for operators.

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

Rupert, Gibbon & Spider, Inc.

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SAFETY DATA SHEET According to Regulation (EC) No.1907/2006

Revision Date 5/6/2015

Product: Pearl Ex # 672 Interference Green

Version 1.0-2015

1.IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING

1.1 Product Identifier

Trade name: Pearl Ex # 672 Interference Green

Trade code: #672

CAS number: 12001-26-2/13463-67-7

1.2 Relevant identified uses of the substance/mixture and uses advised against

Identified uses: Coloring agent

1.3 Details of the supplier of the safety data sheet

Company Name:Rupert, Gibbon & Spider, Inc.Address:1147 Healdsburg Avenue, Healdsburg CA 95448Telephone:800-442-0455Email:service@jacquardproducts.com

1.4 Emergency telephone number

Telephone companies: Poison Control 800-222-1222

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This substance is not classified as dangerous according to European Union Legislation.

2.2 Label elements

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Properties / Symbols: S-phrase(s) 22 Do not breathe dust.

EC regulation criteria 1272/2008 (CLP):

Precautionary statements: P260 Do not breathe dust.

No special labeling needed.

2.3 Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Ingredients	Chemical Name	CAS No.	CI Name	Weight in Percentage (%)
Mica	Mica	12001-26-2	CI 77019	43 ~ 60
TiO ₂	Titanium dioxide	13463-67-7	CI 77891	40 ~ 57

No components that are liable to disclose according to Regulation (EC) No.1907/2006.

Rupert, Gibbon & Spider, Inc.

27103 - JCQRD PEARLEX PGM Mede to



Y DATA SHEET According to Regulation (EC) No.1907/2006

Revision Date 5/6/2015

Product: Pearl Ex # 672 Interference Green

4. FIRST AID MEASURES

4.1 Description of first aid measures

In case of skin contact: Wash off with soap and plenty of water.

In case of eyes contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

In case of Ingestion: If victim is induce vomiting, give 2-4 cupfuls of water, get medical aid. In case of Inhalation: Move person to fresh air. Consult doctor in the event of any complaints.

4.2 Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

4.3 Indication of any immediate medical attention and special treatment needed No information available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use extinguishing measures that are in accordance with the local regulations.

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapours.

5.3 Advice for fire-fighters

IN the event of fire, wear self-contained breathing apparatus.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2 Environmental precautions

Don't let product enter drains.

6.3 Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7.2 and 10.5).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

See also section 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Prevent formation of dust

Rupert, Gibbon & Spider, Inc.

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MSDS for #27103 - JCQRD PEARLEX PGMNT



SAFETY DATA SHEET According to Regulation (EC) No.1907/2006 Revision Date 5/6/2015

Product: Pearl Ex # 672 Interference Green

Version 1.0-2015

Any unavoidable deposit of dust must be regularly removed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry, keep packages closed, location away from other material.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific use are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.2 Exposure controls

Eye/face protection: Safety glasses.

Skin protection:

Hand protection:Not required.

Body protection: Protective work clothing.

Other protection:Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled.

Hygiene measures: Change contaminated clothing. Wash hands after working with substance.

Respiratory protection:

Required when dusts are generated.

Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances.

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be

properly documented.

Thermal Hazards:No information available.

Environmental exposure controls: Don't let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

1 1	
Appearance:	Powder.
colour:	White reflection with luser.
Odour:	Odourless.
Odour threshold:	No information available.
pH:	$5\sim 9$ (10% aqueous slurry).
Melting point:	No information available.
Boiling point:	No information available.
Solid/gas flammability:	No information available.
Lower explosive limit:	No information available.
Upper explosive limit:	No information available.
Vapour density:	No information available.
Flash point:	Not applicable.

Rupert, Gibbon & Spider, Inc.

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MSDS for #27103 - JCQRD PEARLEX PGMNT



SAFETY DATA SHEET According to Regulation (EC) No.1907/2006 Revision Date 5/6/2015

Product: Pearl Ex # 672 Interference Green

No information available. **Evaporation rate:** No information available. Vapour pressure: **Relative density:** $2.4 \sim 3.0 \text{ g/cm}^3$. Solubility in water: Insoluble. Lipid solubility: Insoluble. **Partition coefficient** (n-octanol/water): No information available. Auto-ignition temperature: No information available. **Decomposition temperature:** No information available. Viscosity: No information available. **Explosive properties:** No information available. **Oxidizing properties:** No information available. 9.2 Other information $15 \sim 21 \text{ g/100ml}$. **Bulk density:** Particle size: 5-25 µm.

10. STABILITY AND REACTIVITY

10.1 Reactivity

No information available.

10.2 Chemical stability

Stable under standard ambient conditions(room temperature).

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

Not known to date.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

No information available.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Aspiration hazard

Based on available data the classification criteria are not met.

Specific target organ toxicity – single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

11.2 Other information

Rupert, Gibbon & Spider, Inc.

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Version 1.0-2015

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Y DATA SHEET According to Regulation (EC) No.1907/2006 Revision Date 5/6/2015

Product: Pearl Ex # 672 Interference Green

Version 1.0-2015

Quantitative data on the toxicity of this product are not available. Hazardous properties cannot be excluded, but are relatively improbable due to the compound's poor water solubility. Our own experience has provided no indication of any hazardous potential. Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ

functions.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information available.

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Leave chemicals in original containers. Do not mix with other waste.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

Not classified as dangerous in the meaning of transport regulations.

14.2 Sea transport(IMDG-Code/GGVSee)

Not classified as dangerous in the meaning of transport regulations.

14.3 Air transport (ICAO-IATA/DGR)

Not classified as dangerous in the meaning of transport regulations.

14.4 Special Precautions for User

No information available.

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.

Rupert, Gibbon & Spider, Inc.

MSDS for #27103 - JCQRD PEARLEX PGMNT



SAFETY DATA SHEET According to Regulation (EC) No.1907/2006 Revision Date 5/6/2015

Product: Pearl Ex # 672 Interference Green

Version 1.0-2015

15. REGULATORY INFORMATION

15.1Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Major Accident Hazard Legislation: Directive 96/82/EC does not apply. **National legislation** Storage class: 10 – 13.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

16.1Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can looked up at <u>www.wikipedia.org.</u>

16.2Training advice

Provide adequate information, instruction and training for operators.

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

Rupert, Gibbon & Spider, Inc.

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According to Regulation (EC) No.1907/2006

Date: 12/19/17 Product: Pearl Ex # 673 Interference Violet 1.IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING **1.1 Product Identifier** Trade name: Pearl Ex # 673 Interference Violet Trade code: #673 CAS number: 12001-26-2/13463-67-7 1.2 Relevant identified uses of the substance/mixture and uses advised against Identified uses: Coloring agent 1.3 Details of the supplier of the safety data sheet Company Name: Rupert, Gibbon & Spider, Inc. Address: 1147 Healdsburg Ave. CA, 95448 Telephone: 800-442-0455 1.4 Emergency telephone number CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300 International CHEMTREC, call: 1-703-527-3887 For non-emergency assistance, call: 800-442-0455

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This substance is not classified as dangerous according to European Union Legislation.

2.2 Label elements

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Pictograms / Symbols: None S-phrase(s) 22 Do not breathe dust.

EC regulation criteria 1272/2008 (CLP):

Precautionary statements: P260 Do not breathe dust. No special labeling needed.

2.3 Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Ingredients	Chemical Name	CAS No.	CI Name	Weight in Percentage (%)
Mica	Mica	12001-26-2	CI 77019	51
TiO ₂	Titanium dioxide	13463-67-7	CI 77891	49

No components that are liable to disclose according to Regulation (EC) No.1907/2006.

Rupert, Gibbon & Spider, Inc.

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AFETY DATA SHE

According to Regulation (EC) No.1907/2006

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Product: Pearl Ex # 673 Interference Violet

Date: 12/19/17

4. FIRST AID MEASURES

4.1 Description of first aid measures

In case of skin contact: Wash off with soap and plenty of water.

In case of eyes contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

In case of Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. In case of Inhalation: Move person to fresh air. Consult doctor in the event of any complaints.

4.2 Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use extinguishing measures that are in accordance with the local regulations.

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapors.

5.3 Advice for fire-fighters

IN the event of fire, wear self-contained breathing apparatus.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2 Environmental precautions

Don't let product enter drains.

6.3 Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7.2 and 10.5).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

See also section 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Prevent formation of dust

Rupert, Gibbon & Spider, Inc.



According to Regulation (EC) No.1907/2006

Product: Pearl Ex # 673 Interference Violet

Date: 12/19/17

Any unavoidable deposit of dust must be regularly removed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry, keep packages closed, location away from other material.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific use are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.2 Exposure controls

Eye/face protection: Safety glasses.

Skin protection:

Hand protection: Not required.

Body protection: Protective work clothing.

Other protection: Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled.

Hygiene measures: Change contaminated clothing. Wash hands after working with substance.

Respiratory protection:

Required when dusts are generated.

Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances.

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be

properly documented.

Thermal Hazards: No information available.

Environmental exposure controls: Don't let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:	Powder.	
color:	White reflection with luser.	
Odor:	Odorless.	
Odor threshold:	Odor threshold: No information available.	
pH:	$5 \sim 9$ (10% aqueous slurry).	
Melting point:	No information available.	
Boiling point:	No information available.	
Solid/gas flammability:	No information available.	
Lower explosive limit: No information available.		
Upper explosive limit: No information available.		
Vapor density:	No information available.	
Rupert, C	Gibbon & Spider, Inc.	Page 3 of 6



Date: 12/19/17



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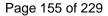
Flash point: Not applicable.

Rupert, Gibbon & Spider, Inc.

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Item Numbers: 27103-1329

MSDS to





SAFETY DATA SHEET

According to Regulation (EC) No.1907/2006

Product: Pearl Ex # 673 Interference Violet Date: 12/19/17		
Evaporation rate:	No information available.	
Vapor pressure:	No information available.	
Relative density:	$2.4 \sim 3.0 \text{ g/cm}^3$.	
Solubility in water:	Insoluble.	
Lipid solubility:	Insoluble.	
Partition coefficient		
(n-octanol/water):	No information available.	
Auto-ignition temperature:	No information available.	
Decomposition temperature:	No information available.	
Viscosity:	No information available.	
Explosive properties:	No information available.	
Oxidizing properties:	No information available.	
9.2 Other information		
Bulk density:	15 ~ 21 g/100ml.	
Particle size:	5-25 μm.	
 10.1 Reactivity No information available. 10.2 Chemical stability Stable under standard ambies 10.3 Possibility of hazardous reaction available. 10.4 Conditions to avoid Not known to date. 10.5 Incompatible materials No information available. 10.6 Hazardous decomposition No information available. 		
11. TOXICOLOGICAL INFORMAT 11.1 Likely routes of exposure Skin contact: Wash off with s		
	sh with plenty of water about 15 minute	es.
	sists, get medical aid.	
-	ous induce vomiting give 2-4 cunfuls o	function got modical aid

Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. Inhalation: Move person to fresh air. Consult doctor in the event of any complaints.

Rupert, Gibbon & Spider, Inc.

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According to Regulation (EC) No.1907/2006

According to Regulation (20) No.1307

Product: Pearl Ex # 673 Interference Violet

Date: 12/19/17

11.2 Information on toxicological effects

Aspiration hazard

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity – repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

11.3 Other information

Quantitative data on the toxicity of this product are not available.

Hazardous properties cannot be excluded, but are relatively improbable due to the compound's poor water solubility.

Our own experience has provided no indication of any hazardous potential.

Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions.

Rupert, Gibbon & Spider, Inc.

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According to Regulation (EC) No.1907/2006

Product: Pearl Ex # 673 Interference Violet

Date: 12/19/17

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information available.

- **12.2 Persistence and degradability** No information available.
- **12.3 Bioaccumulative potential** No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Leave chemicals in original containers. Do not mix with other waste.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

Not classified as dangerous in the meaning of transport regulations.

14.2 Sea transport (IMDG-Code/GGVSee)

Not classified as dangerous in the meaning of transport regulations.

14.3 Air transport (ICAO-IATA/DGR)

Not classified as dangerous in the meaning of transport regulations.

14.4 Special Precautions for User

No information available.

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.



According to Regulation (EC) No.1907/2006

Product: Pearl Ex # 673 Interference Violet

Date: 12/19/17

15. REGULATORY INFORMATION

15.1Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Major Accident Hazard Legislation: Directive 96/82/EC does not apply.

National legislation

Storage class: 10 – 13.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

16.1Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can looked up at <u>www.wikipedia.org.</u>

16.2Training advice

Provide adequate information, instruction and training for operators.

Date: 5/06/2015

The information contained in this SDS is based on data from sources considered to be reliable but Rupert, Gibbon & Spider, Inc. does not guarantee the accuracy or completeness thereof. Rupert, Gibbon & Spider, Inc. urges each customer or recipient of this SDS to study it carefully to become aware of and understand the hazards associated with this product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology or fire and understand the data in this SDS.

This SDS cancels and replaces any preceding release.



According to Regulation (EC) No.1907/2006

Product: Pearl Ex # 674 Interference Gold

Date: 12/19/17

1.IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING

1.1 Product Identifier

Trade name: Pearl Ex # 674 Interference Gold

Trade code: #674

CAS number: 12001-26-2/13463-67-7

1.2 Relevant identified uses of the substance/mixture and uses advised against

Identified uses: Coloring agent

1.3 Details of the supplier of the safety data sheet

Company Name: Rupert, Gibbon & Spider, Inc. **Address:** 1147 Healdsburg Ave. CA, 95448 **Telephone:** 800-442-0455

1.4 Emergency telephone number

CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300 International CHEMTREC, call: 1-703-527-3887 For non-emergency assistance, call: 800-442-0455

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This substance is not classified as dangerous according to European Union Legislation.

2.2 Label elements

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

22

Do not breathe dust.

Pictograms / Symbols: None S-phrase(s)

EC regulation criteria 1272/2008 (CLP):

Precautionary statements: P260 Do not breathe dust. No special labeling needed.

2.3 Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Ingredients	Chemical Name	CAS No.	CI Name	Weight in Percentage (%)
Miss	Miss	12001-26-2	CI 77019	
Mica TiO ₂	Mica Titanium dioxide	12001 20 2	CI 77891	46
			: 	

No components that are liable to disclose according to Regulation (EC) No.1907/2006.

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Rupert, Gibbon & Spider, Inc.



According to Regulation (EC) No.1907/2006

Product: Pearl Ex # 674 Interference Gold

Date: 12/19/17

4. FIRST AID MEASURES

4.1 Description of first aid measures

In case of skin contact: Wash off with soap and plenty of water.

In case of eyes contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

In case of Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. **In case of Inhalation:** Move person to fresh air. Consult doctor in the event of any complaints.

4.2 Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use extinguishing measures that are in accordance with the local regulations.

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapors.

5.3 Advice for fire-fighters

IN the event of fire, wear self-contained breathing apparatus.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2 Environmental precautions

Don't let product enter drains.

6.3 Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7.2 and 10.5).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

See also section 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Prevent formation of dust

Rupert, Gibbon & Spider, Inc.

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According to Regulation (EC) No.1907/2006

Product: Pearl Ex # 674 Interference Gold

Date: 12/19/17

Any unavoidable deposit of dust must be regularly removed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry, keep packages closed, location away from other material.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific use are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.2 Exposure controls

Eye/face protection: Safety glasses.

Skin protection:

Hand protection: Not required.

Body protection: Protective work clothing.

Other protection: Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled.

Hygiene measures: Change contaminated clothing. Wash hands after working with substance.

Respiratory protection:

Required when dusts are generated.

Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances.

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be

properly documented.

Thermal Hazards: No information available.

Environmental exposure controls: Don't let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

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Appearance:	Powder.
color:	White reflection with luser.
Odor:	Odorless.
Odor threshold:	No information available.
pH:	$5\sim 9$ (10% aqueous slurry).
Melting point:	No information available.
Boiling point:	No information available.
Solid/gas flammability:	No information available.
Lower explosive limit:	No information available.
Upper explosive limit:	No information available.
Vapor density:	No information available.
Rupert, C	Gibbon & Spider, Inc.

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MSDS to



SAFETY DATA SHEET

According to Regulation (EC) No.1907/2006

Product: Pearl Ex # 674 Interference Gold

Date: 12/19/17

Flash point:

Not applicable.

Rupert, Gibbon & Spider, Inc.

Item Numbers: 27103-1329



According to Regulation (EC) No.1907/2006

Product: Pearl Ex # 674 Interference Gold

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Date: 12/19/17

Evaporation rate:	No information available.			
Vapor pressure:	No information available.			
Relative density:	$2.4 \sim 3.0 \text{ g/cm}^3$.			
Solubility in water:	Insoluble.			
Lipid solubility:	Insoluble.			
Partition coefficient				
n-octanol/water): No information available.				
Auto-ignition temperature:	No information available.			
Decomposition temperature:	No information available.			
Viscosity:	No information available.			
Explosive properties:	No information available.			
Oxidizing properties:	No information available.			
9.2 Other information				
Bulk density:	$15 \sim 21 \text{ g/100ml}$.			
Particle size: 5-25 μm.				
10. STABILITY AND REACTIVIT	Y			
10.1 Reactivity				
No information available.				
10.2 Chemical stability				
-	nt conditions(room temperature).			
10.3 Possibility of hazardous re				
No information available.				
10.4 Conditions to avoid				
Not known to date.				
10.5 Incompatible materials				
No information available.				
10.6 Hazardous decomposition	products			
No information available.				
11. TOXICOLOGICAL INFORMAT	FION			
11.1 Likely routes of exposure:				
Skin contact: Wash off with se				
	sh with plenty of water about 15 minutes.			
	sists, get medical aid.			

Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. **Inhalation:** Move person to fresh air. Consult doctor in the event of any complaints.

Rupert, Gibbon & Spider, Inc.



According to Regulation (EC) No.1907/2006

Product: Pearl Ex # 674 Interference Gold

Date: 12/19/17

11.1 Information on toxicological effects

Aspiration hazard

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

11.2 Other information

Quantitative data on the toxicity of this product are not available.

Hazardous properties cannot be excluded, but are relatively improbable due to the compound's poor water solubility.

Our own experience has provided no indication of any hazardous potential.

Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions.

Rupert, Gibbon & Spider, Inc.

Item Numbers: 27103-1329



According to Regulation (EC) No.1907/2006

Product: Pearl Ex # 674 Interference Gold

Date: 12/19/17

12.1 Toxicity

No information available.

12.2 Persistence and degradability No information available.

12.3 Bioaccumulative potential No information available.

No information availa

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Leave chemicals in original containers. Do not mix with other waste.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

Not classified as dangerous in the meaning of transport regulations.

14.2 Sea transport (IMDG-Code/GGVSee)

Not classified as dangerous in the meaning of transport regulations.

14.3 Air transport (ICAO-IATA/DGR)

Not classified as dangerous in the meaning of transport regulations.

14.4 Special Precautions for User

No information available.

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.

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According to Regulation (EC) No.1907/2006

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Product: Pearl Ex # 674 Interference Gold

Date: 12/19/17

15. REGULATORY INFORMATION

15.1Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Major Accident Hazard Legislation: Directive 96/82/EC does not apply.

National legislation

Storage class: 10 – 13.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

16.1Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can looked up at <u>www.wikipedia.org.</u>

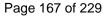
16.2Training advice

Provide adequate information, instruction and training for operators.

Date: 5/06/2015

The information contained in this SDS is based on data from sources considered to be reliable but Rupert, Gibbon & Spider, Inc. does not guarantee the accuracy or completeness thereof. Rupert, Gibbon & Spider, Inc. urges each customer or recipient of this SDS to study it carefully to become aware of and understand the hazards associated with this product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology or fire and understand the data in this SDS.

This SDS cancels and replaces any preceding release.



Μ

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #680 Duo Red-Blue		Date: 12/19/17
1.IDENTIFICATION OF THE SUBSTANCE/MIXTUR	E AND OF THE COMPANY	Y/UNDERTAKING
1.1 Product Identifier		
Trade name: Pearl Ex #680 Duo Red-Blue		
Trade code: #680		
CAS number: 12001-26-2/13463-67-7/6448	-96-0	
1.2 Relevant identified uses of the substance/mix	ture and uses advised ag	gainst
Identified uses: Coloring Agent		
1.3 Details of the supplier of the safety data sheet		
Company Name: Rupert, Gibbon & Spider, Ind Address: 1147 Healdsburg Ave. CA, 95448 Telephone: 800-442-0455		
1.4 Emergency telephone number CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300 International CHEMTREC, call: 1-703-527-3887 For non-emergency assistance, call: 800-442-0455		
2. HAZARDS IDENTIFICATION		
2.1 Classification of the substance or mixture		
This substance is not classified as dangerous a	cording to European Unio	on Legislation.
2.2 Label elements		
Directive criteria, 67/548/CE, 99/45/EC ar	d following amendment	s thereof:
Pictograms / Symbols: None S-phrase(s)	22 Do not breathe du	ust.
EC regulation criteria 1272/2008 (CLP):		
Precautionary statements: P260 Do not by	eathe dust.	

Precautionary statements: P260 Do not breathe dust. No special labeling needed.

2.3 Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Ingredients	Chemical Name	CAS No.	CI Name	Weight in Percentage (%)
Mica	Mica	12001-26-2	CI 77019	44
TiO ₂	Titanium dioxide	13463-67-7	CI 77891	55
Pigment red 31	Pigment red 31	6448-96-0	CI 12360	≤ 1
No components that are liable to disclose according to Regulation (EC) No.1907/2006.				

1



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #680 Duo Red-Blue

Date: 12/19/17

4. FIRST AID MEASURES

4.1 Description of first aid measures

In case of skin contact: Wash off with soap and plenty of water.

In case of eyes contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

In case of Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. **In case of Inhalation:** Move person to fresh air. Consult doctor in the event of any complaints.

4.2 Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

4.3 Indication of any immediate medical attention and special treatment needed No information available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use extinguishing measures that are in accordance with the local regulations. For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapours.

5.3 Advice for fire-fighters

IN the event of fire, wear self-contained breathing apparatus.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2 Environmental precautions

Don't let product enter drains.

6.3 Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7.2 and 10.5).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

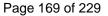
6.4 Reference to other sections

See also section 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Prevent formation of dust





7103 - JCQRD PEARLES **SAFETY DATA SHEET** According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #680 Duo Red-Blue	

Any unavoidable deposit of dust must be regularly removed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry, keep packages closed, location away from other material.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific use are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.2 Exposure controls

Eye/face protection: Safety glasses.

Skin protection:

Hand protection: Not required.

Body protection: Protective work clothing.

Other protection: Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled.

Hygiene measures: Change contaminated clothing. Wash hands after working with substance.

Respiratory protection:

Required when dusts are generated.

Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances.

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Thermal Hazards: No information available.

Environmental exposure controls: Don't let product enter drains.

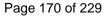
9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties				
Appearance:	Powder.			
color:	Pearlescent pink powder			
Odor:	Odorless.			
Odor threshold:	No information available.			
pH:	$5\sim 9$ (10% aqueous slurry).			
Melting point:	No information available.			
Boiling point:	No information available.			
Solid/gas flammability:	No information available.			
Lower explosive limit:	No information available.			
Upper explosive limit:	No information available.			
Vapor density:	No information available.			
Flash point:	Not applicable.			

Rupert, Gibbon & Spider, Inc.

3

Date: 12/19/17



T103 - JCQRD PEARLES REPETY DATA SHEET

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #680 Duo Red-Blue

Evaporation rate: No information available. No information available. Vapor pressure: $2.5 \sim 3.2 \text{g/cm}^3$. **Relative density:** Solubility in water: Insoluble. Insoluble. Lipid solubility: **Partition coefficient** (n-octanol/water): No information available. Auto-ignition temperature: No information available. **Decomposition temperature:** No information available. No information available. Viscosity: **Explosive properties:** No information available. **Oxidizing properties:** No information available. 9.2 Other information 18~26 g/100ml. Bulk density: Particle size: 10-60 μm. **10. STABILITY AND REACTIVITY 10.1 Reactivity** No information available. **10.2 Chemical stability** Stable under standard ambient conditions(room temperature).

10.3 Possibility of hazardous reactions No information available.

10.4 Conditions to avoid Not known to date.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

No information available.

11. TOXICOLOGICAL INFORMATION

11.1 Likely routes of exposure:

Skin contact: Wash off with soap and plenty of water.

Eye contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. **Inhalation:** Move person to fresh air. Consult doctor in the event of any complaints.

4

Date: 12/19/17



103 - JCQRD PEARLES REFETY DATA SHEET According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #680 Duo Red-Blue

Date: 12/19/17

11.2 Information on toxicological effects

Aspiration hazard

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

11.3 Other information

Quantitative data on the toxicity of this product are not available.

Hazardous properties cannot be excluded, but are relatively improbable due to the compound's poor water solubility.

Our own experience has provided no indication of any hazardous potential.

Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions.

Rupert, Gibbon & Spider, Inc.

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #680 Duo Red-Blue

Date: 12/19/17

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information available.

12.2 Persistence and degradability No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Leave chemicals in original containers. Do not mix with other waste.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

Not classified as dangerous in the meaning of transport regulations.

14.2 Sea transport(IMDG-Code/GGVSee)

Not classified as dangerous in the meaning of transport regulations.

14.3 Air transport (ICAO-IATA/DGR)

Not classified as dangerous in the meaning of transport regulations.

14.4 Special Precautions for User

No information available.

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.

6



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #680 Duo Red-Blue

Date: 12/19/17

15. REGULATORY INFORMATION

15.1Safety, health and environmental regulations/legislation specific for the substance or

mixture

EU regulations

Major Accident Hazard Legislation: Directive 96/82/EC does not apply.

National legislation

Storage class: 10 – 13.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

16.1Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can looked up at www.wikipedia.org.

16.2Training advice

Provide adequate information, instruction and training for operators.

Date: 5/06/2015

The information contained in this SDS is based on data from sources considered to be reliable but Rupert, Gibbon & Spider, Inc. does not guarantee the accuracy or completeness thereof. Rupert, Gibbon & Spider, Inc. urges each customer or recipient of this SDS to study it carefully to become aware of and understand the hazards associated with this product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology or fire and understand the data in this SDS.

This SDS cancels and replaces any preceding release.



According to 1907/2006/EC, Article 31 Revision Date 10/12/2016

Product code: Pearl Ex #681 Duo Blue-Green

1.IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING

1.1 Product Identifier

Trade name: Pearl Ex #681 Duo Blue-Green Trade code: #681

CAS number: 12001-26-2/13463-67-7/18282-10-5/147-14-8

1.2 Relevant identified uses of the substance/mixture and uses advised against

Identified uses: Coloring Agent

1.3 Details of the supplier of the safety data sheet

Company Name: Rupert, Gibbon & Spider, Inc. **Address:** 1147 Healdsburg Ave. CA, 95448 **Telephone:** 800-442-0455

1.4 Emergency telephone number

CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300 International CHEMTREC, call: 1-703-527-3887 For non-emergency assistance, call: 800-442-0455

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This substance is not classified as dangerous according to European Union Legislation.

2.2 Label elements

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Properties / Symbols: S-phrase(s) 22 Do not breathe dust.

EC regulation criteria 1272/2008 (CLP):

Precautionary statements: P260 Do not breathe dust. No special labeling needed.

2.3 Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Ingredients	Chemical Name	CAS No.	CI Name	Weight in Percentage (%)
Mica	Mica	12001-26-2	CI 77019	40-45
TiO ₂	Titanium dioxide	13463-67-7	CI 77891	55-58
SnO ₂	Tin Oxide	18282-10-5	CI 77861	≤ 1
Pigment Blue 15	Pigment Blue 15	147-14-8	CI 73915	≤ 1

No components that are liable to disclose according to Regulation (EC) No.1907/2006.

Item Numbers: 27103-1329

Rupert, Gibbon & Spider, Inc.



According to 1907/2006/EC, Article 31 Revision Date 10/12/2016

Product code: Pearl Ex #681 Duo Blue-Green

4. FIRST AID MEASURES

4.1 Description of first aid measures

In case of skin contact: Wash off with soap and plenty of water.

In case of eyes contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

In case of Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. **In case of Inhalation:** Move person to fresh air. Consult doctor in the event of any complaints.

4.2 Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

4.3 Indication of any immediate medical attention and special treatment needed No information available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use extinguishing measures that are in accordance with the local regulations. For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapours.

5.3 Advice for fire-fighters

IN the event of fire, wear self-contained breathing apparatus.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2 Environmental precautions

Don't let product enter drains.

6.3 Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7.2 and 10.5).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

See also section 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Prevent formation of dust



According to 1907/2006/EC, Article 31 Revision Date 10/12/2016

Product code: Pearl Ex #681 Duo Blue-Green

Any unavoidable deposit of dust must be regularly removed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry, keep packages closed, location away from other material.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific use are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.2 Exposure controls

Eye/face protection: Safety glasses.

Skin protection:

Hand protection: Not required.

Body protection: Protective work clothing.

Other protection: Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled.

Hygiene measures: Change contaminated clothing. Wash hands after working with substance.

Respiratory protection:

Required when dusts are generated.

Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances.

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Thermal Hazards: No information available.

Environmental exposure controls: Don't let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:		Powder.	
color:	Pearlescent blue-green		
	powder		
Odor:		Odorless.	
Odor threshold:		No information available.	
pH:		$6 \sim 9$ (10% aqueous slurry).	
Melting point:		No information available.	
Boiling point:		No information available.	
Solid/gas flammability:		No information available.	
Lower explosive limit:		No information available.	
Upper explosive limit:		No information available.	
Vapor density:		No information available.	
Flash point:		Not applicable.	
Vapor density:		No information available.	

Rupert, Gibbon & Spider, Inc.

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103 - JCQRD PEARLES REAL TA SHEFT

According to 1907/2006/EC, Article 31 Revision Date 10/12/2016

Product code: Pearl Ex #681 Duo Blue-Green

Evaporation rate:	No information available.
Vapor pressure:	No information available.
Relative density:	$2.8 - 2.9 \text{g/cm}^3$.
Solubility in water:	Insoluble.
Lipid solubility:	Insoluble.
Partition coefficient	
(n-octanol/water):	No information available.
Auto-ignition temperature:	No information available.
Decomposition temperature:	No information available.
Viscosity:	No information available.
Explosive properties:	No information available.
Oxidizing properties:	No information available.
9.2 Other information	
Bulk density:	18~ 26 g/100ml.
Particle size:	10-60 μm.

10. STABILITY AND REACTIVITY

10.1 Reactivity

No information available.

10.2 Chemical stability

Stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid Not known to date.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

No information available.

11. TOXICOLOGICAL INFORMATION

11.1 Likely routes of exposure:

Skin contact: Wash off with soap and plenty of water.

Eye contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. Inhalation: Move person to fresh air. Consult doctor in the event of any complaints.



103 - JCQRD PEARLES REPAIL DATA SHEET

According to 1907/2006/EC, Article 31 Revision Date 10/12/2016

Product code: Pearl Ex #681 Duo Blue-Green

11.2 Information on toxicological effects

Aspiration hazard

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

11.3 Other information

Quantitative data on the toxicity of this product are not available.

Hazardous properties cannot be excluded, but are relatively improbable due to the compound's poor water solubility.

Our own experience has provided no indication of any hazardous potential.

Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions.

According to 1907/2006/EC, Article 31 Revision Date 10/12/2016

Product code: Pearl Ex #681 Duo Blue-Green

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information available.

12.2 Persistence and degradability No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Leave chemicals in original containers. Do not mix with other waste.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

Not classified as dangerous in the meaning of transport regulations.

14.2 Sea transport(IMDG-Code/GGVSee)

Not classified as dangerous in the meaning of transport regulations.

14.3 Air transport (ICAO-IATA/DGR)

Not classified as dangerous in the meaning of transport regulations.

14.4 Special Precautions for User

No information available.

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.

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According to 1907/2006/EC, Article 31 Revision Date 10/12/2016

Product code: Pearl Ex #681 Duo Blue-Green

15. REGULATORY INFORMATION

15.1Safety, health and environmental regulations/legislation specific for the substance or

mixture

EU regulations

Major Accident Hazard Legislation: Directive 96/82/EC does not apply.

National legislation

Storage class: 10 – 13.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

16.1Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can looked up at www.wikipedia.org.

16.2Training advice

Provide adequate information, instruction and training for operators.

Date: 10/12/2016

The information contained in this SDS is based on data from sources considered to be reliable but Rupert, Gibbon & Spider, Inc. does not guarantee the accuracy or completeness thereof. Rupert, Gibbon & Spider, Inc. urges each customer or recipient of this SDS to study it carefully to become aware of and understand the hazards associated with this product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology or fire and understand the data in this SDS.

This SDS cancels and replaces any preceding release.

JACQU	Accord	ling to Regulation	on (EC)	No.1907/2006	
Product code: Pea	rl Ex #683 Bright `	Yellow			Date: 12/19/17
1.IDENTIFICATI	ON OF THE SUBST	ANCE/MIXTUR	E AND	OF THE COMPANY/ U	NDERTAKING
1.1 Product Iden	tifier				
Trade nam	e: Pearl Ex #683 B	right Yellow			
Trade code	: #683				
CAS number	er: 12001-26-2/1	3463-67-7/635	8-30-1		
1.2 Relevant ider	ntified uses of the	substance/mix	xture a	nd uses advised agains	st
Identified	uses: Coloring Age	ent			
1.3 Details of the	supplier of the s	afety data shee	t		
Telephone 1.4 Emergency t CHEMTREC call: 1-800-4 International	147 Healdsburg Av : 800-442-0455 elephone number : (24HR Emergency 24-9300 CHEMTREC, call: 1 ergency assistance,	r Telephone), -703-527-3887	5		
2. HAZARDS IDE	NTIFICATION				
2.1 Classification	n of the substance	or mixture			
This substa	nce is not classifie	d as dangerous a	accordii	ng to European Union Le	egislation.
2.2 Label elemen	ıts				
Directive c	riteria, 67/548/0	CE, 99/45/EC at	nd folk	owing amendments the	ereof:
Pictograms	/ Symbols: None	S-phrase(s)	22	Do not breathe dust.	
EC regulation c	riteria 1272/200	8 (CLP):			
Precaution	ary statements:	P260 Do not b	reathe	dust.	
No special	abeling needed.				
2.3 Other hazard	is				

2.3 Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Ingredients	Chemical Name	CAS No.	CI Name	Weight in Percentage (%)
Mica TiO ₂	Mica Titanium dioxide	12001-26-2 13463-67-7	CI 77019 CI 77891	
Pigment Violet 23	Pigment Violet 23	6358-30-1	CI 51319	

No components that are liable to disclose according to Regulation (EC) No.1907/2006.

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Item Numbers: 27103-1329

Rupert, Gibbon & Spider, Inc.

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According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #683 Bright Yellow

Date: 12/19/17

4. FIRST AID MEASURES

4.1 Description of first aid measures

In case of skin contact: Wash off with soap and plenty of water.

In case of eyes contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

In case of Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. **In case of Inhalation:** Move person to fresh air. Consult doctor in the event of any complaints.

4.2 Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

4.3 Indication of any immediate medical attention and special treatment needed No information available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use extinguishing measures that are in accordance with the local regulations. For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapors.

5.3 Advice for fire-fighters

IN the event of fire, wear self-contained breathing apparatus.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2 Environmental precautions

Don't let product enter drains.

6.3 Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7.2 and 10.5).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

See also section 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Prevent formation of dust

Page 2 of 6

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #683 Bright Yellow

Date: 12/19/17

Any unavoidable deposit of dust must be regularly removed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry, keep packages closed, location away from other material.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific use are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.2 Exposure controls

Eye/face protection: Safety glasses.

Skin protection:

Hand protection: Not required.

Body protection: Protective work clothing.

Other protection: Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled.

Hygiene measures: Change contaminated clothing. Wash hands after working with substance.

Respiratory protection:

Required when dusts are generated.

Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances.

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Thermal Hazards: No information available.

Environmental exposure controls: Don't let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic phy	rsical an d chemical properties			
Appearance:	Powder.			
Color:	Pearlescent yellow powder			
Odor:	Odorless.			
Odor threshold:	No information available.			
pH:	$5 \sim 9$ (10% aqueous slurry).			
Melting point:	No information available.			
Boiling point:	No information available.			
Solid/gas flammability:	No information available.			
Lower explosive limit:	No information available.			
Upper explosive limit:	No information available.			
Vapor density:	No information available.			
Flash point:	Not applicable.			

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Item Numbers: 27103-1329

Date: 12/19/17

🔁 27103 - JCQRD PEARLEX RG Y DATA SHEET

According to Regulation (EC) No.1907/2006

Product code:

Pearl	Ex #683	Briaht	Yellow

Evaporation rate:	No information available.
Vapor pressure:	No information available.
Relative density:	$2.7 \sim 3.3 \text{ g/cm}^3$.
Solubility in water:	Insoluble.
-	Insoluble.
Lipid solubility: Partition coefficient	insoluble.
(n-octanol/water):	No information available.
Auto-ignition temperature:	No information available.
Decomposition temperature:	No information available.
Viscosity:	No information available.
Explosive properties:	No information available.
Oxidizing properties:	No information available.
9.2 Other information	No mormation available.
Bulk density:	$20 \sim 26 \text{ g/100ml}.$
Particle size:	10-60 μm.
10. STABILITY AND REACTIVIT	NV
10.1 Reactivity	1
No information available.	
10.2 Chemical stability	
-	nt conditions (room temperature).
10.3 Possibility of hazardous re	
No information available.	
10.4 Conditions to avoid	
Not known to date.	
10.5 Incompatible materials	
No information available.	
10.6 Hazardous decomposition	products
No information available.	
11. TOXICOLOGICAL INFORMA	ΓΙΟΝ
11.1 Likely routes of exposure	:
Skin contact: Wash off with s	soan and plenty of water

Skin contact: Wash off with soap and plenty of water.

Eye contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. Inhalation: Move person to fresh air. Consult doctor in the event of any complaints.

Page 4 of 6



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #683 Bright Yellow

Date: 12/19/17

11.2 Information on toxicological effects

Aspiration hazard

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

11.3 Other information

Quantitative data on the toxicity of this product are not available.

Hazardous properties cannot be excluded, but are relatively improbable due to the compound's poor water solubility.

Our own experience has provided no indication of any hazardous potential.

Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions.

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Item Numbers: 27103-1329

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #683 Bright Yellow

Date: 12/19/17

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information available.

12.2 Persistence and degradability No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Leave chemicals in original containers. Do not mix with other waste.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

Not classified as dangerous in the meaning of transport regulations.

14.2 Sea transport (IMDG-Code/GGVSee)

Not classified as dangerous in the meaning of transport regulations.

14.3 Air transport (ICAO-IATA/DGR)

Not classified as dangerous in the meaning of transport regulations.

14.4 Special Precautions for User

No information available.

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #683 Bright Yellow

Date: 12/19/17

15. REGULATORY INFORMATION

15.1Safety, health and environmental regulations/legislation specific for the substance or

mixture

EU regulations

Major Accident Hazard Legislation: Directive 96/82/EC does not apply.

National legislation

Storage class: 10 – 13.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

16.1Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can looked up at www.wikipedia.org.

16.2Training advice

Provide adequate information, instruction and training for operators.

Date: 5/06/2015

The information contained in this SDS is based on data from sources considered to be reliable but Rupert, Gibbon & Spider, Inc. does not guarantee the accuracy or completeness thereof. Rupert, Gibbon & Spider, Inc. urges each customer or recipient of this SDS to study it carefully to become aware of and understand the hazards associated with this product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology or fire and understand the data in this SDS.

This SDS cancels and replaces any preceding release.

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7103 - JCQRD PEARLEX RGM Y DATA SHEFT

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #684 Flamingo Pink	Date: 12/19/
1.IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/	UNDERTAKING
1.1 Product Identifier	
Trade name: Pearl Ex #684 Flamingo Pink	

Trade code: #684

CAS number: 12001-26-2/13463-67-7/6358-30-1

1.2 Relevant identified uses of the substance/mixture and uses advised against

Identified uses: Coloring Agent

1.3 Details of the supplier of the safety data sheet

Company Name: Rupert, Gibbon & Spider, Inc. Address: 1147 Healdsburg Ave. CA, 95448 Telephone: 800-442-0455

1.4 Emergency telephone number

CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300 International CHEMTREC, call: 1-703-527-3887 For non-emergency assistance, call: 800-442-0455

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This substance is not classified as dangerous according to European Union Legislation.

2.2 Label elements

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Pictograms / Symbols: None S-phrase(s) 22 Do not breathe dust.

EC regulation criteria 1272/2008 (CLP):

P260 Do not breathe dust. Precautionary statements: No special labeling needed.

2.3 Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Ingredients	Chemical Name	CAS No.	CI Name	Weight in Percentage (%)
Mica	Mica	12001-26-2	CI 77019	
TiO ₂	Titanium dioxide	13463-67-7	CI 77891	4/
Pigment Violet 23	Pigment Violet 23	6358-30-1	CI 51319	

No components that are liable to disclose according to Regulation (EC) No.1907/2006.

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Item Numbers: 27103-1329

Rupert, Gibbon & Spider, Inc.

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Date: 12/19/17

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #684 Flamingo Pink

Date: 12/19/17

4. FIRST AID MEASURES

4.1 Description of first aid measures

In case of skin contact: Wash off with soap and plenty of water.

In case of eyes contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

In case of Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. **In case of Inhalation:** Move person to fresh air. Consult doctor in the event of any complaints.

4.2 Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

4.3 Indication of any immediate medical attention and special treatment needed No information available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use extinguishing measures that are in accordance with the local regulations. For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapors.

5.3 Advice for fire-fighters

IN the event of fire, wear self-contained breathing apparatus.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2 Environmental precautions

Don't let product enter drains.

6.3 Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7.2 and 10.5).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

See also section 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Prevent formation of dust

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🚊 7103 - JCQRD PEARLEX RGM Y DATA SHEFT

According to Regulation (EC) No.1907/2006

Product	code:	Pearl	Ex	#684	Flamingo	Pink
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Date: 12/19/17

Any unavoidable deposit of dust must be regularly removed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry, keep packages closed, location away from other material.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific use are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.2 Exposure controls

Eye/face protection: Safety glasses.

Skin protection:

Hand protection: Not required.

Body protection: Protective work clothing.

Other protection: Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled.

Hygiene measures: Change contaminated clothing. Wash hands after working with substance.

Respiratory protection:

Required when dusts are generated.

Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances.

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Rupert, Gibbon & Spider, Inc.

Thermal Hazards: No information available.

Environmental exposure controls: Don't let product enter drains.

9. PHYSICAL AND CHEMICAL	9. PHYSICAL AND CHEMICAL PROPERTIES				
9.1 Information on basic phy	vsical an d chemical properties				
Appearance:	Powder.				
color:	Pearlescent pink powder				
Odor:	Odorless.				
Odor threshold:	No information available.				
pH:	5 ~ 9 (10% aqueous slurry).				
Melting point:	No information available.				
Boiling point:	No information available.				
Solid/gas flammability:	No information available.				
Lower explosive limit:	No information available.				
Upper explosive limit:	No information available.				
Vapour density:	No information available.				
Flash point:	Not applicable.				

Item Numbers: 27103-1329

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According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #684 Flamingo Pink

Date: 12/19/17

Evaporation rate:	No information available.					
Vapor pressure:	No information available.					
Relative density: $2.7 \sim 3.3 \text{ g/cm}^3$.						
Solubility in water:	Insoluble.					
Lipid solubility:	Insoluble.					
Partition coefficient						
(n-octanol/water):	No information available.					
Auto-ignition temperature:	No information available.					
Decomposition temperature:	No information available.					
Viscosity:	No information available.					
Explosive properties:	No information available.					
Oxidizing properties:	No information available.					
9.2 Other information						
Bulk density:	20 ~ 26 g/100ml					
Particle size:	10-60 μm.					
10. STABILITY AND REACTIVIT	Ϋ́					
10.1 Reactivity						
No information available.						
10.2 Chemical stability						
	nt conditions (room temperature).					
10.3 Possibility of hazardous re	eactions					
No information available.						
10.4 Conditions to avoid						
Not known to date.						
10.5 Incompatible materials						
No information available.						
10.6 Hazardous decomposition	products					
No information available.						
11. TOXICOLOGICAL INFORMA	TION					
11.1 Likely routes of exposure						
Skin contact: Wash off with s						
	sh with plenty of water about 15 minutes.					
	rsists, get medical aid.					
	ous, induce vomiting, give 2-4 cupfuls of water, get medical aid					

Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. **Inhalation:** Move person to fresh air. Consult doctor in the event of any complaints.

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Rupert, Gibbon & Spider, Inc.

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According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #684 Flamingo Pink

Date: 12/19/17

11.2 Information on toxicological effects

Aspiration hazard

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

11.3 Other information

Quantitative data on the toxicity of this product are not available.

Hazardous properties cannot be excluded, but are relatively improbable due to the compound's poor water solubility.

Our own experience has provided no indication of any hazardous potential.

Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions.

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Item Numbers: 27103-1329

PT103 - JCQRD PEARLES AFETY DATA SHEET

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #684 Flamingo Pink

Date: 12/19/17

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information available.

12.2 Persistence and degradability No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Leave chemicals in original containers. Do not mix with other waste.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

Not classified as dangerous in the meaning of transport regulations.

14.2 Sea transport (IMDG-Code/GGVSee)

Not classified as dangerous in the meaning of transport regulations.

14.3 Air transport (ICAO-IATA/DGR)

Not classified as dangerous in the meaning of transport regulations.

14.4 Special Precautions for User

No information available.

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #684 Flamingo Pink

Date: 12/19/17

15. REGULATORY INFORMATION

15.1Safety, health and environmental regulations/legislation specific for the substance or

mixture

EU regulations

Major Accident Hazard Legislation: Directive 96/82/EC does not apply.

National legislation

Storage class: 10 – 13.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

16.1Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can looked up at www.wikipedia.org.

16.2Training advice

Provide adequate information, instruction and training for operators.

Date: 5/06/2015

The information contained in this SDS is based on data from sources considered to be reliable but Rupert, Gibbon & Spider, Inc. does not guarantee the accuracy or completeness thereof. Rupert, Gibbon & Spider, Inc. urges each customer or recipient of this SDS to study it carefully to become aware of and understand the hazards associated with this product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology or fire and understand the data in this SDS.

This SDS cancels and replaces any preceding release.

TIO3 - JCQRD PEARLES APETY DATA SHEET

According to Regulation (EC) No.1907/2006

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Product code: Pearl Ex #686 Turquoise

Date: 12/19/17

1.IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING

1.1 Product Identifier

Trade name: Pearl Ex #686 Turquoise Trade code: #686

CAS number: 12001-26-2/13463-67-7/6358-30-1

1.2 Relevant identified uses of the substance/mixture and uses advised against

Identified uses: Coloring Agent

1.3 Details of the supplier of the safety data sheet

Company Name: Rupert, Gibbon & Spider, Inc. **Address:** 1147 Healdsburg Ave. CA, 95448 **Telephone:** 800-442-0455

1.4 Emergency telephone number

CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300 International CHEMTREC, call: 1-703-527-3887 For non-emergency assistance, call: 800-442-0455

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This substance is not classified as dangerous according to European Union Legislation.

2.2 Label elements

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Pictograms / Symbols: None S-phrase(s) 22 Do not breathe dust.

EC regulation criteria 1272/2008 (CLP):

Precautionary statements: P260 Do not breathe dust. No special labeling needed.

2.3 Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Ingredients	Chemical Name	CAS No.	CI Name	Weight in Percentage (%)
Mica TiO ₂	Mica Titanium dioxide	12001-26-2 13463-67-7	CI 77019 CI 77891	
Pigment Violet 23	Pigment Violet 23	6358-30-1	CI 51319	≦ 1

No components that are liable to disclose according to Regulation (EC) No.1907/2006.

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #686 Turquoise

Date: 12/19/17

4. FIRST AID MEASURES

4.1 Description of first aid measures

In case of skin contact: Wash off with soap and plenty of water.

In case of eyes contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

In case of Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. **In case of Inhalation:** Move person to fresh air. Consult doctor in the event of any complaints.

4.2 Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

4.3 Indication of any immediate medical attention and special treatment needed No information available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use extinguishing measures that are in accordance with the local regulations. For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapors.

5.3 Advice for fire-fighters

IN the event of fire, wear self-contained breathing apparatus.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2 Environmental precautions

Don't let product enter drains.

6.3 Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7.2 and 10.5).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

See also section 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Prevent formation of dust

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M

According to Regulation (EC) No.1907/2006

C.	1		

Product code	: Pearl	Ex #686	Turquoise

Date: 12/19/17

Any unavoidable deposit of dust must be regularly removed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry, keep packages closed, location away from other material.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific use are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.2 Exposure controls

Eye/face protection: Safety glasses.

Skin protection:

Hand protection: Not required.

Body protection: Protective work clothing.

Other protection: Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled.

Hygiene measures: Change contaminated clothing. Wash hands after working with substance.

Respiratory protection:

Required when dusts are generated.

Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances.

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Thermal Hazards: No information available.

Environmental exposure controls: Don't let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

ysical and chemical properties		
Powder.		
Pearlescent turquoise powder		
Odourless.		
No information available.		
$5\sim 9$ (10% aqueous slurry).		
No information available.		
Not applicable.		



Date: 12/19/17

7103 - JCQRD PEARLE 🗸 DATA SHEET

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #686 Turquoise

Evaporation rate:	No information available.
Vapor pressure:	No information available.
Relative density:	$2.7 \sim 3.3 \text{ g/cm}^3$.
Solubility in water:	Insoluble.
Lipid solubility:	Insoluble.
Partition coefficient	
(n-octanol/water):	No information available.
Auto-ignition temperature:	No information available.
Decomposition temperature:	No information available.
Viscosity:	No information available.
Explosive properties:	No information available.
Oxidizing properties:	No information available.
9.2 Other information	
Bulk density:	$20 \sim 26 \text{ g/100ml}.$
Particle size:	10-60 μm.
10. STABILITY AND REACTIVIT 10.1 Reactivity	Y
No information available.	
10.2 Chemical stability	
Stable under standard ambier	nt conditions (room temperature).
10.3 Possibility of hazardous re	eactions
No information available.	
10.4 Conditions to avoid	
Not known to date.	
10.5 Incompatible materials	
No information available.	
10.6 Hazardous decomposition	products
No information available.	
11. TOXICOLOGICAL INFORMAT	
Skin contact: Wash off with s	

Eye contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. Inhalation: Move person to fresh air. Consult doctor in the event of any complaints.

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Rupert, Gibbon & Spider, Inc.

M



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #686 Turquoise

Date: 12/19/17

11.2 Information on toxicological effects

Aspiration hazard

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

11.3 Other information

Quantitative data on the toxicity of this product are not available.

Hazardous properties cannot be excluded, but are relatively improbable due to the compound's poor water solubility.

Our own experience has provided no indication of any hazardous potential.

Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions.

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Item Numbers: 27103-1329

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #686 Turquoise

Date: 12/19/17

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information available.

12.2 Persistence and degradability No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Leave chemicals in original containers. Do not mix with other waste.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

Not classified as dangerous in the meaning of transport regulations.

14.2 Sea transport (IMDG-Code/GGVSee)

Not classified as dangerous in the meaning of transport regulations.

14.3 Air transport (ICAO-IATA/DGR)

Not classified as dangerous in the meaning of transport regulations.

14.4 Special Precautions for User

No information available.

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.

М

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #686 Turquoise

Date: 12/19/17

15. REGULATORY INFORMATION

15.1Safety, health and environmental regulations/legislation specific for the substance or

mixture

EU regulations

Major Accident Hazard Legislation: Directive 96/82/EC does not apply.

National legislation

Storage class: 10 – 13.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

16.1Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can looked up at www.wikipedia.org.

16.2Training advice

Provide adequate information, instruction and training for operators.

Date: 5/06/2015

The information contained in this SDS is based on data from sources considered to be reliable but Rupert, Gibbon & Spider, Inc. does not guarantee the accuracy or completeness thereof. Rupert, Gibbon & Spider, Inc. urges each customer or recipient of this SDS to study it carefully to become aware of and understand the hazards associated with this product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology or fire and understand the data in this SDS.

This SDS cancels and replaces any preceding release.

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #687 True Blue

Date: 12/19/17

1.IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING

1.1 Product Identifier

Trade name: Pearl Ex #687 True Blue Trade code: #687

CAS number: 12001-26-2/13463-67-7/147-14-8

1.2 Relevant identified uses of the substance/mixture and uses advised against

Identified uses: Coloring Agent

1.3 Details of the supplier of the safety data sheet

Company Name: Rupert, Gibbon & Spider, Inc. **Address:** 1147 Healdsburg Ave. CA, 95448 **Telephone:** 800-442-0455

1.4 Emergency telephone number

CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300 International CHEMTREC, call: 1-703-527-3887 For non-emergency assistance, call: 800-442-0455

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This substance is not classified as dangerous according to European Union Legislation.

2.2 Label elements

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Pictograms / Symbols: None S-phrase(s) 22 Do not breathe dust.

EC regulation criteria 1272/2008 (CLP):

Precautionary statements: P260 Do not breathe dust. No special labeling needed.

2.3 Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Ingredients	Chemical Name	CAS No.	CI Name	Weight in Percentage (%)
Mica	Mica Titanium dioxide	12001-26-2 13463-67-7	CI 77019 CI 77891	46
Pigment Blue 15	Pigment Blue 15	147-14-8	CI 77891	

No components that are liable to disclose according to Regulation (EC) No.1907/2006.

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #687 True Blue

Date: 12/19/17

4. FIRST AID MEASURES

4.1 Description of first aid measures

In case of skin contact: Wash off with soap and plenty of water.

In case of eyes contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

In case of Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. **In case of Inhalation:** Move person to fresh air. Consult doctor in the event of any complaints.

4.2 Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

4.3 Indication of any immediate medical attention and special treatment needed No information available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use extinguishing measures that are in accordance with the local regulations. For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapors.

5.3 Advice for fire-fighters

IN the event of fire, wear self-contained breathing apparatus.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2 Environmental precautions

Don't let product enter drains.

6.3 Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7.2 and 10.5).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

See also section 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Prevent formation of dust

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According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #687 True Blue

Date: 12/19/17

Any unavoidable deposit of dust must be regularly removed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry, keep packages closed, location away from other material.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific use are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.2 Exposure controls

Eye/face protection: Safety glasses.

Skin protection:

Hand protection: Not required.

Body protection: Protective work clothing.

Other protection: Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled.

Hygiene measures: Change contaminated clothing. Wash hands after working with substance.

Respiratory protection:

Required when dusts are generated.

Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances.

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Thermal Hazards: No information available.

Environmental exposure controls: Don't let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic phy	9.1 Information on basic physical and chemical properties				
Appearance:	Powder.				
Color:	Pearlescent blue powder				
Odor:	Odorless.				
Odor threshold:	No information available.				
pH:	$5\sim 9$ (10% aqueous slurry).				
Melting point:	No information available.				
Boiling point:	No information available.				
Solid/gas flammability:	y: No information available.				
Lower explosive limit:	No information available.				
Upper explosive limit:	No information available.				
Vapor density:	No information available.				
Flash point:	Not applicable.				

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Item Numbers: 27103-1329

Rupert, Gibbon & Spider, Inc.

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MS

103 - JCQRD PEARLES **CHATY DATA SHEET** According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #687 True Blue

Date: 12/19/17

Evaporation rate:	No information available.				
Vapor pressure:	No information available.				
Relative density: $2.4 \sim 3.0 \text{ g/cm}^3$.					
Solubility in water:	Insoluble.				
Lipid solubility:	Insoluble.				
Partition coefficient	monube.				
(n-octanol/water):	No information available.				
Auto-ignition temperature:	No information available.				
Decomposition temperature:	No information available.				
Viscosity:	No information available.				
Explosive properties:	No information available.				
Oxidizing properties:	No information available.				
9.2 Other information					
Bulk density:	17~ 25 g/100ml.				
Particle size:	10-60 μm.				
10. STABILITY AND REACTIVIT	Y				
10.1 Reactivity					
No information available.					
10.2 Chemical stability					
Stable under standard ambie	nt conditions (room temperature).				
10.3 Possibility of hazardous re	eactions				
No information available.					
10.4 Conditions to avoid					
Not known to date.					
10.5 Incompatible materials					
No information available.					
10.6 Hazardous decomposition	i products				
No information available.					
11. TOXICOLOGICAL INFORMA 11.1 Likely routes of exposure					
Skin contact: Wash off with s					
	sh with plenty of water about 15 minutes.				
-	si with plenty of water about 15 minutes.				

If discomfort persists, get medical aid.

Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. Inhalation: Move person to fresh air. Consult doctor in the event of any complaints.

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103 - JCQRD PEARLES REFETY DATA SHEET According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #687 True Blue

Date: 12/19/17

11.2 Information on toxicological effects

Aspiration hazard

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

11.3 Other information

Quantitative data on the toxicity of this product are not available.

Hazardous properties cannot be excluded, but are relatively improbable due to the compound's poor water solubility.

Our own experience has provided no indication of any hazardous potential.

Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions.

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Item Numbers: 27103-1329

103 - JCQRD PEARLES CHATY DATA SHEET According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #687 True Blue

Date: 12/19/17

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information available.

12.2 Persistence and degradability No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Leave chemicals in original containers. Do not mix with other waste.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

Not classified as dangerous in the meaning of transport regulations.

14.2 Sea transport (IMDG-Code/GGVSee)

Not classified as dangerous in the meaning of transport regulations.

14.3 Air transport (ICAO-IATA/DGR)

Not classified as dangerous in the meaning of transport regulations.

14.4 Special Precautions for User

No information available.

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.

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According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #687 True Blue

Date: 12/19/17

15. REGULATORY INFORMATION

15.1Safety, health and environmental regulations/legislation specific for the substance or

mixture

EU regulations

Major Accident Hazard Legislation: Directive 96/82/EC does not apply.

National legislation

Storage class: 10 – 13.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

16.1Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can looked up at www.wikipedia.org.

16.2Training advice

Provide adequate information, instruction and training for operators.

Date: 5/06/2015

The information contained in this SDS is based on data from sources considered to be reliable but Rupert, Gibbon & Spider, Inc. does not guarantee the accuracy or completeness thereof. Rupert, Gibbon & Spider, Inc. urges each customer or recipient of this SDS to study it carefully to become aware of and understand the hazards associated with this product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology or fire and understand the data in this SDS.

This SDS cancels and replaces any preceding release.

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Item Numbers: 27103-1329

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #688 Misty Lavender

Date: 12/19/17

1.IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING

1.1 Product Identifier

Trade name: Pearl Ex #688 Misty Lavender Trade code: #688

CAS number: 12001-26-2/13463-67-7/6358-30-1

1.2 Relevant identified uses of the substance/mixture and uses advised against

Identified uses: Coloring Agent

1.3 Details of the supplier of the safety data sheet

Company Name: Rupert, Gibbon & Spider, Inc. **Address:** 1147 Healdsburg Ave. CA, 95448 **Telephone:** 800-442-0455

1.4 Emergency telephone number

CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300 International CHEMTREC, call: 1-703-527-3887 For non-emergency assistance, call: 800-442-0455

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This substance is not classified as dangerous according to European Union Legislation.

2.2 Label elements

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Pictograms/ Symbols: None S-phrase(s) 22 Do not breathe dust.

EC regulation criteria 1272/2008 (CLP):

Precautionary statements: P260 Do not breathe dust. No special labeling needed.

2.3 Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Ingredients	Chemical Name	CAS No.	CI Name	Weight in Percentage (%)
Mica TiO ₂	Mica Titanium dioxide	12001-26-2 13463-67-7	CI 77019	50
Pigment Violet 23	Pigment Violet 23	6358-30-1	CI 51319	

No components that are liable to disclose according to Regulation (EC) No.1907/2006.

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Rupert, Gibbon & Spider, Inc.

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TO THE PEARLES REPTY DATA SHEET

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #688 Misty Lavender

Date: 12/19/17

4. FIRST AID MEASURES

4.1 Description of first aid measures

In case of skin contact: Wash off with soap and plenty of water.

In case of eyes contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

In case of Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. **In case of Inhalation:** Move person to fresh air. Consult doctor in the event of any complaints.

4.2 Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

4.3 Indication of any immediate medical attention and special treatment needed No information available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use extinguishing measures that are in accordance with the local regulations. For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapors.

5.3 Advice for fire-fighters

IN the event of fire, wear self-contained breathing apparatus.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2 Environmental precautions

Don't let product enter drains.

6.3 Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7.2 and 10.5).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

See also section 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Prevent formation of dust

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TO A SHEET BARLEY BOMME

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #688 Misty Lavender

Date: 12/19/17

Any unavoidable deposit of dust must be regularly removed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry, keep packages closed, location away from other material.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific use are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.2 Exposure controls

Eye/face protection: Safety glasses.

Skin protection:

Hand protection: Not required.

Body protection: Protective work clothing.

Other protection: Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled.

Hygiene measures: Change contaminated clothing. Wash hands after working with substance.

Respiratory protection:

Required when dusts are generated.

Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances.

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Thermal Hazards: No information available.

Environmental exposure controls: Don't let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties			
Appearance:	Powder.		
Color:	Pearlescent violet powder		
Odor:	Odorless.		
Odor threshold:	No information available.		
pH:	$5\sim 9$ (10% aqueous slurry).		
Melting point:	No information available.		
Boiling point:	No information available.		
Solid/gas flammability:	No information available.		
Lower explosive limit:	No information available.		
Upper explosive limit:	No information available.		
Vapor density:	No information available.		
Flash point:	Not applicable.		

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Item Numbers: 27103-1329

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Date: 12/19/17

TO A SHEET SAFETY DATA SHEET

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #688 Misty Lavender

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Evaporation rate:	No information available.
Vapor pressure:	No information available.
Relative density:	$2.7 \sim 3.3 \text{ g/cm}^3$.
Solubility in water:	Insoluble.
Lipid solubility:	Insoluble.
Partition coefficient	
(n-octanol/water):	No information available.
Auto-ignition temperature:	No information available.
Decomposition temperature:	No information available.
Viscosity:	No information available.
Explosive properties:	No information available.
Oxidizing properties:	No information available.
9.2 Other information	
Bulk density:	$20 \sim 26 \text{ g/100ml}.$
Particle size:	10-60 μm.
10. STABILITY AND REACTIVIT	Y
10.1 Reactivity	
No information available.	
10.2 Chemical stability	
-	nt conditions (room temperature).
10.3 Possibility of hazardous re	
No information available.	
10.4 Conditions to avoid	
Not known to date.	
10.5 Incompatible materials	
No information available.	
10.6 Hazardous decomposition	products
No information available.	
	ΓΙΟΝ
Skin contact: Wash off with s	
Eye contact: Immediately flus	oap and penty of water.

If discomfort persists, get medical aid.

Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. **Inhalation:** Move person to fresh air. Consult doctor in the event of any complaints.

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103 - JCQRD PEARLEY BOMPTY DATA SHEET

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #688 Misty Lavender

Date: 12/19/17

11.2 Information on toxicological effects

Aspiration hazard

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

11.3 Other information

Quantitative data on the toxicity of this product are not available.

Hazardous properties cannot be excluded, but are relatively improbable due to the compound's poor water solubility.

Our own experience has provided no indication of any hazardous potential.

Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions.

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Rupert, Gibbon & Spider, Inc.

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According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #688 Misty Lavender

Date: 12/19/17

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information available.

12.2 Persistence and degradability No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Leave chemicals in original containers. Do not mix with other waste.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

Not classified as dangerous in the meaning of transport regulations.

14.2 Sea transport (IMDG-Code/GGVSee)

Not classified as dangerous in the meaning of transport regulations.

14.3 Air transport (ICAO-IATA/DGR)

Not classified as dangerous in the meaning of transport regulations.

14.4 Special Precautions for User

No information available.

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #688 Misty Lavender

Date: 12/19/17

15. REGULATORY INFORMATION

15.1Safety, health and environmental regulations/legislation specific for the substance or

mixture

EU regulations

Major Accident Hazard Legislation: Directive 96/82/EC does not apply.

National legislation

Storage class: 10 – 13.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

16.1Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can looked up at <u>www.wikipedia.org.</u>

16.2Training advice

Provide adequate information, instruction and training for operators.

Date: 5/06/2015

The information contained in this SDS is based on data from sources considered to be reliable but Rupert, Gibbon & Spider, Inc. does not guarantee the accuracy or completeness thereof. Rupert, Gibbon & Spider, Inc. urges each customer or recipient of this SDS to study it carefully to become aware of and understand the hazards associated with this product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology or fire and understand the data in this SDS.

This SDS cancels and replaces any preceding release.

103 - JCQRD PEARLEY REALTY DATA SHEFT

According to Regulation (EC) No.1907/2006

M

Product code: Pearl Ex #689 Blue Russet

Date: 12/19/17

1.IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING

1.1 Product Identifier

Trade name: Pearl Ex #689 Blue Russet Trade code: #689

CAS number: 12001-26-2/13463-67-7/6358-30-1

1.2 Relevant identified uses of the substance/mixture and uses advised against

Identified uses: Coloring Agent

1.3 Details of the supplier of the safety data sheet

Company Name: Rupert, Gibbon & Spider, Inc. **Address:** 1147 Healdsburg Ave. CA, 95448 **Telephone:** 800-442-0455

1.4 Emergency telephone number

CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300 International CHEMTREC, call: 1-703-527-3887 For non-emergency assistance, call: 800-442-0455

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This substance is not classified as dangerous according to European Union Legislation.

2.2 Label elements

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Pictograms / Symbols: None S-phrase(s) 22 Do not breathe dust.

EC regulation criteria 1272/2008 (CLP):

Precautionary statements: P260 Do not breathe dust. No special labeling needed.

2.3 Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Ingredients	Chemical Name	CAS No.	CI Name	Weight in Percentage (%)
Mica TiO2	Mica Titanium dioxide	12001-26-2 13463-67-7	CI 77019 CI 77891	47
Pigment Violet 23	Pigment Violet 23	6358-30-1	CI 51319	

No components that are liable to disclose according to Regulation (EC) No.1907/2006.

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Rupert, Gibbon & Spider, Inc.

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103 - JCQRD PEARLES APPTY DATA SHEET

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #689 Blue Russet

Date: 12/19/17

4. FIRST AID MEASURES

4.1 Description of first aid measures

In case of skin contact: Wash off with soap and plenty of water.

In case of eyes contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

In case of Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. **In case of Inhalation:** Move person to fresh air. Consult doctor in the event of any complaints.

4.2 Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

4.3 Indication of any immediate medical attention and special treatment needed No information available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use extinguishing measures that are in accordance with the local regulations. For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapors.

5.3 Advice for fire-fighters

IN the event of fire, wear self-contained breathing apparatus.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2 Environmental precautions

Don't let product enter drains.

6.3 Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7.2 and 10.5).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

See also section 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Prevent formation of dust

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103 - JCQRD PEARLES AGETY DATA SHEET

According to Regulation (EC) No.1907/2006

Product c	ode: Pear	Ex #689	Blue	Russet

Date: 12/19/17

Any unavoidable deposit of dust must be regularly removed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry, keep packages closed, location away from other material.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific use are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.2 Exposure controls

Eye/face protection: Safety glasses.

Skin protection:

Hand protection: Not required.

Body protection: Protective work clothing.

Other protection: Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled.

Hygiene measures: Change contaminated clothing. Wash hands after working with substance.

Respiratory protection:

Required when dusts are generated.

Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances.

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Thermal Hazards: No information available.

Environmental exposure controls: Don't let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties		
Appearance:	Powder.	
Color:	Pearlescent red powder	
Odor:	Odorless.	
Odor threshold:	No information available.	
pH:	$5 \sim 9$ (10% aqueous slurry).	
Melting point:	No information available.	
Boiling point:	No information available.	
Solid/gas flammability:	No information available.	
Lower explosive limit:	No information available.	
Upper explosive limit:	No information available.	
Vapour density:	No information available.	
Flash point:	Not applicable.	

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Item Numbers: 27103-1329

Rupert, Gibbon & Spider, Inc.

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Date: 12/19/17

According to Regulation (EC) No.1907/20

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #689 Blue Russet	
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Evaporation rate:	aporation rate: No information available.			
Vapor pressure:	pressure: No information available.			
Relative density:	$2.7 \sim 3.3 \text{ g/cm}^3$.			
Solubility in water.	Insoluble.			
Solubility in water:	Insoluble.			
Lipid solubility: Partition coefficient	Insoluble.			
(n-octanol/water):	No information available.			
. , ,	No information available.			
Auto-ignition temperature:	No information available.			
Decomposition temperature:	No information available.			
Viscosity:				
Explosive properties: No information available.				
Oxidizing properties:No information available.9.2 Other information				
9.2 Other mormation				
Bulk density:	$20 \sim 26 \text{ g/100ml}.$			
Particle size:	10-60 μm.			
10 STADII ITV AND DEACTIVIT	v			
10. STABILITY AND REACTIVITY				
10.1 Reactivity				
No information available.				
10.2 Chemical stability Stable under standard embient conditions (room temperature)				
Stable under standard ambient conditions (room temperature). 10.3 Possibility of hazardous reactions				
No information available.				
10.4 Conditions to avoid				
Not known to date.				
10.5 Incompatible materials				
No information available.				
10.6 Hazardous decomposition products				
No information available.				
11. TOXICOLOGICAL INFORMATION	ΓΙΟΝ			
11.1 Likely routes of exposure	11.1 Likely routes of exposure:			
Skin contact: Wash off with soap and plenty of water.				

Skin contact: Wash off with soap and plenty of water.

Eye contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. Inhalation: Move person to fresh air. Consult doctor in the event of any complaints.

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Rupert, Gibbon & Spider, Inc.



Product code: Pearl Ex #689 Blue Russet

Date: 12/19/17

11.2 Information on toxicological effects

Aspiration hazard

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

11.3 Other information

Quantitative data on the toxicity of this product are not available.

Hazardous properties cannot be excluded, but are relatively improbable due to the compound's poor water solubility.

Our own experience has provided no indication of any hazardous potential.

Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions.

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Item Numbers: 27103-1329

Product code: Pearl Ex #689 Blue Russet

Date: 12/19/17

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information available.

12.2 Persistence and degradability No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Leave chemicals in original containers. Do not mix with other waste.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

Not classified as dangerous in the meaning of transport regulations.

14.2 Sea transport (IMDG-Code/GGVSee)

Not classified as dangerous in the meaning of transport regulations.

14.3 Air transport (ICAO-IATA/DGR)

Not classified as dangerous in the meaning of transport regulations.

14.4 Special Precautions for User

No information available.

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.

103 - JCQRD PEARLES AGETY DATA SHEFT

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #689 Blue Russet

Date: 12/19/17

15. REGULATORY INFORMATION

15.1Safety, health and environmental regulations/legislation specific for the substance or

mixture

EU regulations

Major Accident Hazard Legislation: Directive 96/82/EC does not apply.

National legislation

Storage class: 10 – 13.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

16.1Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can looked up at www.wikipedia.org.

16.2Training advice

Provide adequate information, instruction and training for operators.

Date: 5/06/2015

The information contained in this SDS is based on data from sources considered to be reliable but Rupert, Gibbon & Spider, Inc. does not guarantee the accuracy or completeness thereof. Rupert, Gibbon & Spider, Inc. urges each customer or recipient of this SDS to study it carefully to become aware of and understand the hazards associated with this product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology or fire and understand the data in this SDS.

This SDS cancels and replaces any preceding release.

Rupert, Gibbon & Spider, Inc.



Product code: Pearl Ex #693 Duo Violet-Brass	Date: 12/19/17
1.IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF T	'HE COMPANY/ UNDERTAKING
1.1 Product Identifier	-
Trade name: Pearl Ex #693 Duo Violet-Brass	
Trade code: #693	
CAS number: 12001-26-2/13463-67-7/6448-96-0	
1.2 Relevant identified uses of the substance/mixture and us	es advised against
Identified uses: Coloring Agent	
1.3 Details of the supplier of the safety data sheet	
Company Name: Rupert, Gibbon & Spider, Inc. Address: 1147 Healdsburg Ave. CA, 95448 Telephone: 800-442-0455	
1.4 Emergency telephone number CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300 International CHEMTREC, call: 1-703-527-3887 For non-emergency assistance, call: 800-442-0455	
2. HAZARDS IDENTIFICATION 2.1 Classification of the substance or mixture	
This substance is not classified as dangerous according to	Furonean Union Legislation
2.2 Label elements	Buropean omon Legislation.
Directive criteria, 67/548/CE, 99/45/EC and following	amendments thereof
	not breathe dust.
EC regulation criteria 1272/2008 (CLP):	

Precautionary statements: P260 Do not breathe dust. No special labeling needed.

2.3 Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Ingredients	Chemical Name	CAS No.	CI Name	Weight in Percentage (%)
Mica	Mica	12001-26-2	CI 77019	57
TiO ₂	Titanium dioxide	13463-67-7	CI 77891	42
Pigment red 31	Pigment red 31	6448-96-0	CI 12360	<u>i</u> ≤ 1

No components that are liable to disclose according to Regulation (EC) No.1907/2006.

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Rupert, Gibbon & Spider, Inc.

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Product code: Pearl Ex #693 Duo Violet-Brass

Date: 12/19/17

4. FIRST AID MEASURES

4.1 Description of first aid measures

In case of skin contact: Wash off with soap and plenty of water.

In case of eyes contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

In case of Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. **In case of Inhalation:** Move person to fresh air. Consult doctor in the event of any complaints.

4.2 Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

4.3 Indication of any immediate medical attention and special treatment needed No information available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use extinguishing measures that are in accordance with the local regulations. For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapors.

5.3 Advice for fire-fighters

IN the event of fire, wear self-contained breathing apparatus.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2 Environmental precautions

Don't let product enter drains.

6.3 Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7.2 and 10.5).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

See also section 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Prevent formation of dust

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Any unavoidable deposit of dust must be regularly removed.

7.2 Conditions for safe storage, including any incompatibilities

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Store in a cool and dry, k	keep packages closed, location away from other material.	
7.3 Specific end use(s)		
Apart from the uses mentioned in section 1.2 no other specific use are stipulated.		
8. EXPOSURE CONTRO	LS/PERSONAL PROTECTION	
8.1 Control parameter	'S	
8.2 Exposure controls		
Eye/face protection: S	afety glasses.	
Skin protection:		
Hand protection: Not re	quired.	
Body protection: Protec	tive work clothing.	
Other protection: Prote	ctive clothing needs to be selected specifically for the workplace, depending	
on concentrations and q	juantities of the hazardous substances handled.	
Hygiene measures: Ch	ange contaminated clothing. Wash hands after working with substance.	
Respiratory protection	on:	
Required when dust	s are generated.	
Recommended Filter	r type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances.	
The entrepreneur ha	as to ensure that maintenance, cleaning and testing of respiratory protective	
devices are carried out a	according to the instructions of the producer. These measures have to be	
properly documented.		
Thermal Hazards: No i	nformation available.	
Environmental expos	sure controls: Don't let product enter drains.	
9. PHYSICAL AND CHE	MICAL PROPERTIES	
9.1 Information on bas	sic physical and chemical properties	
Appearance:	Powder.	
Color:	Pearlescent purple powder	

Appearance:	Powder.
Color:	Pearlescent purple powder
Odor:	Odorless.
Odor threshold:	No information available.
pH:	$5\sim 9$ (10% aqueous slurry).
Melting point:	No information available.
Boiling point:	No information available.
Solid/gas flammability:	No information available.
Lower explosive limit:	No information available.
Upper explosive limit:	No information available.
Vapor density:	No information available.
Flash point:	Not applicable.

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According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #693 Duo Violet-Brass

Evaporation rate: No information available. No information available. Vapor pressure: $2.5 \sim 3.1 \text{ g/cm}^3$. **Relative density:** Solubility in water: Insoluble. Insoluble. Lipid solubility: **Partition coefficient** (n-octanol/water): No information available. Auto-ignition temperature: No information available. **Decomposition temperature:** No information available. No information available. Viscosity: **Explosive properties:** No information available. **Oxidizing properties:** No information available. 9.2 Other information 17~25 g/100ml. Bulk density: Particle size: 10-60 μm. **10. STABILITY AND REACTIVITY 10.1 Reactivity** No information available. **10.2 Chemical stability** Stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions No information available.

10.4 Conditions to avoid Not known to date.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

No information available.

11. TOXICOLOGICAL INFORMATION

11.1 Likely routes of exposure:

Skin contact: Wash off with soap and plenty of water.

Eye contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. **Inhalation:** Move person to fresh air. Consult doctor in the event of any complaints.

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11.2 Information on toxicological effects

Aspiration hazard

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

11.3 Other information

Quantitative data on the toxicity of this product are not available.

Hazardous properties cannot be excluded, but are relatively improbable due to the compound's poor water solubility.

Our own experience has provided no indication of any hazardous potential.

Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions.

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7103 - JCQRD PEARLES **SAFETY DATA SHEET** According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #693 Duo Violet-Brass

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12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information available.

12.2 Persistence and degradability No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Leave chemicals in original containers. Do not mix with other waste.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

Not classified as dangerous in the meaning of transport regulations.

14.2 Sea transport (IMDG-Code/GGVSee)

Not classified as dangerous in the meaning of transport regulations.

14.3 Air transport (ICAO-IATA/DGR)

Not classified as dangerous in the meaning of transport regulations.

14.4 Special Precautions for User

No information available.

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.

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15. REGULATORY INFORMATION

$15.1Safety, health and environmental regulations/legislation\ specific\ for\ the\ substance\ or$

mixture

EU regulations

Major Accident Hazard Legislation: Directive 96/82/EC does not apply.

National legislation

Storage class: 10 – 13.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

16.1Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can looked up at www.wikipedia.org.

16.2Training advice

Provide adequate information, instruction and training for operators.

Date: 5/06/2015

The information contained in this SDS is based on data from sources considered to be reliable but Rupert, Gibbon & Spider, Inc. does not guarantee the accuracy or completeness thereof. Rupert, Gibbon & Spider, Inc. urges each customer or recipient of this SDS to study it carefully to become aware of and understand the hazards associated with this product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology or fire and understand the data in this SDS.

This SDS cancels and replaces any preceding release.