

SAFETY DATA SHEET (SDS)

01232-1009



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

Revision Date: 12/15/2020

This SDS Sheet covers the following Jacquard products:

| Item Number: | Item Name: |
|--------------|---------------------|
| JAC1KIT | Marbling Class Pack |

These products contain the following components:

| Item Number: | Item Name: | SDS Page Reference: |
|-----------------------------|----------------|-----------------------------|
| 101-110 (ALL COLORS) | Marbling Color | Marbling Color Pages 1-6 |
| CHM1006 / CHM2006 / CHM3006 | Alum | Alum Pages 1-7 |
| CHM0003 / CHM1003 / CHM2003 | Carrageenan | Carrageenan Pages 1-10 |
| JMA1200 / JMA2200 / JMA4200 | Synthetic Gall | Synthetic Gall Pages 1-7 |

SAFETY DATA SHEET (SDS)



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Marbling Color - Pg 1

Revision Date: 08/26/2019

SECTION 1 - CHEMICAL, PRODUCT & COMPANY INFORMATION

| | | |
|----------------------|----------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| Product Name: | MARBLING COLOR | |
| Product Number/Code: | 101-110 (ALL COLORS) | |
| Recommended Use: | Paint for fabric and paper | |
| Restrictions on use: | None known | |
| Manufacturer: | Rupert, Gibbon & Spider, Inc. 1147 Healdsburg Ave. Healdsburg, CA 95448 1-800-442-0455 / 707-433-9577 | |
| Emergency Number: | ChemTel, Inc. - Contract #MIS9128344 | |
| | North America: 1-800-255-3924 | International: 1-813-248-0585 |

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 classified |
| 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: | Observe good industrial hygiene practices. |
| Response: | Wash hands after handling. |
| Storage: | Keep in cool, dry location. |
| Disposal: | Dispose of waste and residues in accordance with local authority requirements. |
| Hazard(s) not otherwise classified: | None known |

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SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

| Chemical identity | CAS # | Content in percent (%)* |
|--------------------|---------------|-------------------------|
| Organic Pigments | Not Hazardous | >3 |
| Acrylic Polymer(s) | Not Hazardous | >9 |
| Residual Monomers | Not Available | <0.01 |
| Aqua ammonia | 1336-21-6 | <0.02 |
| Water | 7732-18-5 | < 88 |

SECTION 4 - FIRST AID MEASURES

| Description of first aid measures: | |
|-----------------------------------------|------------------------------------------------------------------------------------------|
| In the event of skin contact: | Wash with water and soap as a precaution. If skin irritation persists, call a physician. |
| In the event of eye contact: | Rinse with plenty of water. If eye irritation persists, consult a specialist. |
| In the event of swallowing: | Consult a physician if necessary. |
| In the event of exposure by inhalation: | Move to fresh air. |

SECTION 5 - FIREFIGHTING MEASURES

| | |
|------------------------------|-----------------|
| Flammability of the product: | N/A |
| Auto-Ignition Temperature: | Non-ignitable |
| Flash Points: | Non-combustible |

SECTION 6 - ACCIDENTAL RELEASE MEASURES

| | |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Methods and material for containment and clean up: | Contain spills immediately with inert materials (e.g., sand, earth). Transfer liquids and solid diking material to separate suitable containers for recovery or disposal. |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

SECTION 7 - HANDLING AND STORAGE

| | |
|--------------------------------------------------------------|-----------------------------|
| Conditions for safe storage including any incompatibilities: | Keep in cool, dry location. |
|--------------------------------------------------------------|-----------------------------|

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

| Control parameters: | |
|------------------------------------------------------------------------|----------------|
| Exposure controls: | N/A |
| Appropriate engineering controls: | N/A |
| Individual protection measures, such as personal protective equipment: | |
| Eye/face protection: | Safety Glasses |

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SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

| General information: | |
|----------------------------------------------------------------|-------------------------------------------------------------------|
| Appearance and physical state: | Liquid |
| Color: | Yellow, Orange, Red, Violet, Blue, Turquoise, Green, White, Black |
| Type of Odor: | Acrylic odor |
| Odor threshold: | N/A |
| Important health, safety and environmental information: | |
| Initial Boiling Point and Boiling Range: | 100°C/212°F |
| Melting Point/Freezing Point: | N/A |
| Flammability Classification: | N/A |
| Flash Point: | Non-combustible |
| Auto-ignition Temperature: | Non-ignitable |
| Decomposition Temperature: | N/A |
| Flammability Limits (lower/upper): | N/A |
| Evaporation rate: | N/A |
| Vapor Pressure: | N/A |
| Vapor Density (Air=1): | N/A |
| Octanol/Water Partition Coefficient (log Pow): | N/A |
| Specific Gravity: | 1.1 |
| Bulk Density: | N/A |
| Water Solubility: | N/A |
| pH: | 9.5 |
| Viscosity: | N/A |
| Explosive Properties: | N/A |
| Oxidizing Properties: | N/A |
| Molecular Formula: | N/A |
| Molecular Weight: | N/A |
| Relative Density: | N/A |
| Water/Oil Dist. Coeff.: | N/A |
| Ionicity (in water): | Anionic |
| Dispersion properties: | Suspension |

SECTION 10 - STABILITY AND REACTIVITY

| | |
|------------------------------------------|--------|
| Stability: | Stable |
| Instability temperature: | N/A |
| Conditions of instability: | N/A |
| Incompatibility with various substances: | Acids |
| Corrosivity: | N/A |
| Special remarks on reactivity: | N/A |
| Special remarks on corrosivity: | N/A |
| Polymerization: | N/A |

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SECTION 11 - TOXICOLOGICAL INFORMATION

| Information on toxicological effects: | |
|---------------------------------------------------------------|---------------------------------|
| Acute toxicity (list all possible routes of exposure) | |
| Acute Oral Toxicity: | LD50, Rat > 5,000 mg/kg |
| Acute Dermal Toxicity: | LD50, Rabbit > 5,000mg/kg |
| Acute Inhalation Toxicity: | Product test data not available |
| Skin Corrosion/Irritation: | May cause transient irritation |
| Serious Eye Damage / Eye Irritation: | No eye irritation |
| Respiratory or Skin Sensitization: | N/A |
| Carcinogenicity: | N/A |
| Reproductive Toxicity: | |
| Specific Target Organ Toxicity - single exposure (STOT-se): | N/A |
| Specific Target Organ Toxicity - repeated exposure (STOT-re): | N/A |

SECTION 12 - ECOLOGICAL INFORMATION

| Toxicity: | |
|----------------------------------------------------|-----|
| Ecotoxicity: | N/A |
| BOD5 and COD: | N/A |
| Products of biodegradation: | N/A |
| Toxicity of the products of biodegradation: | N/A |
| Special remarks on the products of biodegradation: | N/A |

SECTION 13 - DISPOSAL CONSIDERATIONS

| Waste treatment methods: | |
|---------------------------------|---------------------------------------|
| Disposal: | In accordance with local regulations. |

SECTION 14 - TRANSPORT INFORMATION

| | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DOT Classification: | Not regulated for transport |
| Classification for SEA transport (IMO-IMDG): | Not regulated for transport. Consult IMO regulations before transporting ocean bulk. Transport in bulk according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code. |
| Classification for AIR transport (IATA/ICAO): | Not regulated for transport |
| This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, and regulations and rules relating to the transportation of the material. | |

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SECTION 15 - REGULATORY INFORMATION

| Safety, health and environmental regulations/legislation specific for the substance or mixture: | |
|------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| This product is not a hazardous chemical under 29CFR 1910.1200, and therefore is not covered by Title III of SARA. | |
| Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to Know Act of 1986) Section 313: | This product does not contain a chemical which is listed in Section 13 at or above de minimis concentrations. |
| Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) Section 103: | Releases of this material to air, land, or water are not reportable to the National Response Center under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or to state and local emergency planning committees under the Superfund Amendments and Reauthorization Act (SARA) Title III Section 304. |
| Pennsylvania Worker and Community Right-to-Know Act: | Any material listed as "Not Hazardous" in the CAS REG No. column of Section 2, Composition/Information On Ingredients, of this SDS is a trade secret under the provisions of the Pennsylvania Worker and Community Right-to-Know Act. |
| United States TSCA Inventory (TSCA): | All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory. |
| California Proposition 65: | This product does NOT contain any chemicals known to the state of California to cause cancer. |

SECTION 16 - OTHER INFORMATION

| HMIS Hazard ID: | |
|-------------------------------------------------------------------------------------------------------|-----|
| Health: | N/A |
| Flammability: | N/A |
| Reactivity: | N/A |
| 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: 08/26/2019

| National Chemical Inventories: | |
|-------------------------------------------------------------------------------------------------------|-------------------|
| All components of this product are listed on the following chemical substance inventories: TSCA (USA) | |
| DSL | (Canada) |
| EINECS | (Europe) |
| ENCS | (Japan) ECL |
| | (Korea) |
| AICS | (Australia) NZIoC |
| | (New Zealand) |
| PICCS | (Philippines) |
| IECSC | (China) |

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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 |
| PBT | 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 | Wassergefährdungsklasse (Water Hazard Class) WHMIS Workplace Hazardous Material Identification System |

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Alum - Pg 1

Revision Date: 07/30/2018

SECTION 1 - CHEMICAL, PRODUCT & COMPANY INFORMATION

| | | |
|----------------------|----------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| Product Name: | ALUM | |
| Product Number/Code: | CHM1006 / CHM2006 / CHM3006 | |
| Recommended Use: | Mordant for paper and fabric | |
| Synonym(s): | Potassium alum (chemical family: inorganic aluminum salt) | |
| Restrictions on use: | None known | |
| Manufacturer: | Rupert, Gibbon & Spider, Inc. 1147 Healdsburg Ave. Healdsburg, CA 95448 1-800-442-0455 / 707-433-9577 | |
| Emergency Number: | ChemTel, Inc. - Contract #MIS9128344 | |
| | North America: 1-800-255-3924 | International: 1-813-248-0585 |

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 | Irritant |
| Label Elements | |
| Pictogram: |  |
| Signal Words: | WARNING |
| Hazard Statements-EU: | H315 Causes skin irritation. H319 Causes serious eye irritation. H302 Harmful if swallowed. H335 May cause respiratory irritation. |
| Precautionary Statements-EU: | |
| Prevention: | P102 Keep out of reach of children. |
| Response: | P310+P312 If Swallowed and feeling unwell: contact a Poison Control Center or physician. P305+P351+P338 If in Eyes: Rinse cautiously with water for several minutes. If present and easy to do remove contacts. Continue rinsing. P302+P352 If on Skin: Wash with soap and water. |

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SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

| Component | Weight % | 67/548/EEC Classification (EU) | CLP/Classification Regulation (EC) | REACH No./EC- No. |
|---------------------------------------------------------|----------|--------------------------------|-------------------------------------------------------------------|-------------------|
| Aluminum potassium sulfate dodecahydrate CAS# 7784-24-9 | 100 | Xn: R22 Xi: R36/38 | H315-Skin Irrit. H319-Eye Irrit. H302-Harmful if swallowed. | ----- |
| <i>(see section 16 for full EU text R-phases)</i> | | | | |

SECTION 4 - FIRST AID MEASURES

| Description of first aid measures: | |
|-----------------------------------------|----------------------------------------------------------------------------------------------------|
| In the event of skin contact: | Wash with soap and water. If irritation persists get medical attention. |
| In the event of eye contact: | Immediately rinse with water. Continue rinsing for at least 15 minutes. Get medical attention. |
| In the event of swallowing: | Clean and rinse mouth with water. Do Not induce vomiting. If feeling unwell get medical attention. |
| In the event of exposure by inhalation: | Move to fresh air. Get medical attention if needed. |
| Notes to physician: | Treat symptomatically and supportively. |

SECTION 5 - FIREFIGHTING MEASURES

| | |
|--------------------------------|-----------------------------------------------------------------------------------------------|
| Flammability classification: | Non-flammable |
| Flash point: | N/A |
| Auto Ignition: | N/A |
| Burn Rate: | N/A |
| LEL: | N/A |
| UEL: | N/A |
| Hazardous combustion products: | Thermal decomposition can lead to the formation of hazardous and irritating gases and vapors. |
| Extinguishing media: | Water, CO ₂ , chemical foam. |
| Advice for fire fighters: | As in any fire, when appropriate wear self-contained breathing apparatus and protective gear. |

SECTION 6 - ACCIDENTAL RELEASE MEASURES

| | |
|----------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| Personal precautions, protective equipment and emergency procedures: | Avoid dust formation and have adequate ventilation. Use appropriate personal protective equipment. |
| Methods and material for containment and clean up: | Sweep, shovel or vacuum into a suitable container for reuse or disposal. Avoid creating dust. |
| Environmental precautions: | Contain and clean up spill. Prevent from entering the environment. |

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Alum - Pg 3

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SECTION 7 - HANDLING AND STORAGE

| | |
|--------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Precautions for safe handling: | Avoid creating dusty conditions. Use personal protect equipment as appropriate. Avoid contact with eyes and skin. Avoid breathing dust. Do not ingest. Always wash hands when leaving the work area. Never eat or drink, smoke, or take medicine without first washing. |
| Conditions for safe storage including any incompatibilities: | Keep material in closed container stored in a secure, dry location away from incompatible materials. |

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

| | | | |
|-------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|-----------------|
| Control parameters: | | | |
| Exposure limits: | This product as supplied does not contain any hazardous materials with occupational exposure limits established by region specific regulatory bodies. | | |
| Biological Limit Value: | This product as supplied does not contain any hazardous materials with biological limits established by region specific regulatory bodies. | | |
| Derived No effect Level (DNEL): | No information available. | | |
| Predicted No Effect Concentration (PNEC): | No information available. | | |
| North America: Soluble aluminum salts respiratory category | | | |
| Category | ACGIH | NIOSH | OSHA-Final PELs |
| Soluble aluminum salts | None listed | 2mg/m ³ TWA (as Al) (listed as soluble aluminum salts) | None listed |
| Individual protection measures, such as personal protective equipment: | | | |
| Eye/face protection: | Goggles | | |
| Skin protection: | Wear appropriate clothing to prevent skin exposure. | | |
| Hand protection: | Wear gloves. | | |
| Environmental exposure controls: | Ensure adequate ventilation. Have eyewash and safety shower stations available. Have work procedures and handling systems that minimize dust formation. | | |
| Respiratory protection: | If exposure to dust is expected or if irritation is experienced follow OSHA 29CFR 1910.134 or European Standard EN 149 regulations for respirator use. | | |

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SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

| General information: | |
|----------------------------------------------------------------|--------------------------------------------------------|
| Appearance and physical state: | Powder, solid granules |
| Color: | White |
| Type of Odor: | Negligible |
| Odor threshold: | N/A |
| Important health, safety and environmental information: | |
| Initial Boiling Point and Boiling Range: | N/A |
| Melting Point/Freezing Point: | 92°C |
| Flammability Classification: | N/A |
| Flash Point: | N/A |
| Auto-ignition Temperature: | N/A |
| Decomposition Temperature: | >200°C |
| Flammability Limits (lower/upper): | N/A |
| Evaporation rate: | N/A |
| Vapor Pressure: | N/A |
| Vapor Density (Air=1): | N/A |
| Octanol/Water Partition Coefficient (log Pow): | N/A |
| Specific Gravity: | 1.757 |
| Bulk Density: | N/A |
| Water Solubility: | 140 g/l @ 20°C |
| pH: | 10% Solution @ 20°C: 3.0-3.5 |
| Viscosity: | N/A |
| Explosive Properties: | N/A |
| Oxidizing Properties: | N/A |
| Molecular Formula: | $\text{AlK}(\text{SO}_4)_2 \cdot 12\text{H}_2\text{O}$ |
| Molecular Weight: | 474.39 |
| Relative Density: | N/A |

SECTION 10 - STABILITY AND REACTIVITY

| | |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Stability: | Stable under normal conditions. |
| Possibility of hazardous reactions: | Hazardous polymerization does not occur. |
| Conditions to avoid: | Incompatible products, dust generation. |
| Incompatible materials: | Strong oxidizing agents, water reactive materials, metals other than stainless alloys. |
| Hazardous decomposition products: | Decomposition of dried potassium aluminum sulfate occurs at high temperatures can produce sulfur oxides and other noxious fumes. |

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SECTION 11 - TOXICOLOGICAL INFORMATION

| Information on toxicological effects: | |
|-------------------------------------------------------|--------------------------------------------------------------------------------------------|
| Acute toxicity (list all possible routes of exposure) | |
| Acute Toxicity: | No acute toxicity information is available for this product. |
| Chronic Toxicity: | No known carcinogenic chemicals in this product. Not listed by: ACGIH, IARC, NTP, OSHA. |
| Mutagenic effects: | No information available. |
| Reproductive effects: | No information available. |
| Developmental effects: | No information available. |
| Endocrine Disruptor Information: | None known. |
| Sensitivity: | No information available. |
| Target Organs: | No information available. |
| Additional Information: | see RTECS # W55690000 |

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. |
| Results of PBT and vPvB assessment (EC reg. 453/2010): | No information available. |

SECTION 13 - DISPOSAL CONSIDERATIONS

| Waste treatment methods: | |
|---------------------------------------|---------------------------------------------------------------------------------------------|
| Product and product residue disposal: | Dispose of in accordance with local regulations. |
| USEPA/RCRA: | Unused product is not listed as a hazardous waste. |
| Contaminated packaging: | Dispose of in accordance with local regulations. Clean and recycle packaging when possible. |

SECTION 14 - TRANSPORT INFORMATION

| | |
|-------------|---------------|
| US DOT: | Not regulated |
| Canada TDG: | Not regulated |
| IMDG/IMO: | Not regulated |
| ADR: | Not regulated |
| IATA: | Not regulated |

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SECTION 15 - REGULATORY INFORMATION

| Safety, health and environmental regulations/legislation specific for the substance or mixture: | |
|--------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| USA TSCA Inventory: | Listed |
| Canada DSL/NDSL Inventory: | Listed |
| EU/EINECS/ELINCS Inventory: | Listed |
| KECL Inventory: | Listed |
| PICCS: | Listed |
| ENCS: | Listed |
| CHINA: | Listed |
| AICS: | Listed |
| OSHA regulated substances (29CFR 1910): | Not listed |
| SARA 302 Extremely Hazardous Substance: | Not listed |
| SARA 311/312 Category: | No SARA hazards |
| SARA 313: | Not listed |
| CERCLA Hazardous Substance: | Not listed |
| SARA Toxic Chemical (40CFR 372.65) | Not listed |
| CERCLA Reportable Quantity (RQ): | Not listed |
| CA Prop 65: | This product does not contain any chemicals(s) known to the State of California to cause cancer, birth defects or reproductive harm. |
| ILIR: | Not listed |
| State/Province: | State/Province/regional specific regulations have not been determined. |

SECTION 16 - OTHER INFORMATION

| HMIS Hazard ID: | |
|-------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| Health: | 1 |
| Flammability: | 0 |
| Physical hazards: | 0 |
| NFTA Rating: | |
| Health: | 1 |
| Fire: | 0 |
| Reactivity hazard: | 0 |
| Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; *Chronic health effect | |
| Full Text R-phrases referenced section 3: | R22 Harmful if swallowed. R36/38 Irritating to eyes and skin. |

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: 07/30/2018

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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 |
| PBT | 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 | Wassergefährdungsklasse (Water Hazard Class) WHMIS Workplace Hazardous Material Identification System |

SAFETY DATA SHEET (SDS)



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

Carrageenan - Pg 1

Revision Date: 03/02/2018

SECTION 1 - CHEMICAL, PRODUCT & COMPANY INFORMATION

| | | |
|----------------------|----------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| Product Name: | CARRAGEENAN | |
| Product Number/Code: | CHM0003 / CHM1003 / CHM2003 | |
| Recommended Use: | Natural gelling agent that provides a viscous surface for marbling | |
| Description: | Chemical family: Polysaccharides | |
| Synonym(s): | Chondrus crispus (Carrageenan) extract (INCI name), Carrageenan, Irish moss, Chondrus extract, Seaweed flour | |
| Restrictions on use: | See section 16 for more information | |
| Manufacturer: | Rupert, Gibbon & Spider, Inc. 1147 Healdsburg Ave. Healdsburg, CA 95448 1-800-442-0455 / 707-433-9577 | |
| Emergency Number: | ChemTel, Inc. - Contract #MIS9128344 | |
| | North America: 1-800-255-3924 | International: 1-813-248-0585 |

SECTION 2 - HAZARD(S) IDENTIFICATION

| | |
|-------------------------------------------|------------------------------------------------------------|
| Toxicological Data on Ingredients: | |
| Hazard Classification | May form combustible dust concentrations in air. |
| Physical Hazards: | Not classified |
| Health Hazards: | Do not inhale |
| 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: | See section 8 |
| Response: | See sections 4, 5 & 6 |
| Storage: | See section 7 |
| Disposal: | See section 13 |
| Hazard(s) not otherwise classified: | None known |

SAFETY DATA SHEET (SDS)

Carrageenan - Pg 2

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SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

| Chemical identity | Content in percent (%)* | CAS # |
|------------------------------------------------|-------------------------|-----------|
| Carrageenan (Chemical family: polysaccharides) | 100% | 9000-07-1 |

SECTION 4 - FIRST AID MEASURES

| Description of first aid measures: | |
|-----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| In the event of skin contact: | Wash with water and soap as a precaution. |
| In the event of eye contact: | Flush eyes with water as a precaution. Get medical attention if eye irritation develops or persists. |
| In the event of swallowing: | Never give anything by mouth to an unconscious person. Drink plenty of water. Get medical attention if symptoms occur. |
| In the event of exposure by inhalation: | Remove person to fresh air. If breathing is difficult or if discomfort occurs and persists, obtain medical attention. |
| Most important symptoms and effects, acute and delayed: | Difficulty breathing. Cough. |
| Indication of any immediate medical attention and special treatment needed: | Aspiration or inhalation of this product could cause chemical pneumonitis. Treatment is symptomatic and supportive. |

SECTION 5 - FIREFIGHTING MEASURES

| Suitable extinguishing media: | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
|---------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Unsuitable extinguishing media: | None known |
| Special hazards arising from the substance or mixture : | Avoid dust formation fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. |
| Advice for fire fighters: | As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. |
| Explosion data: | |
| Sensitivity to mechanical impact: | Not sensitive. |
| Sensitivity to static discharge: | Static electricity might be sufficient to ignite dust clouds. Possibility of ignition will depend on the minimum ignition energy (MIE) and the type of operations undertaken with the material. MIE values are not provided in this SDS. |

SAFETY DATA SHEET (SDS)

Carrageenan - Pg 3

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SECTION 6 - ACCIDENTAL RELEASE MEASURES

| | |
|----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Personal precautions, protective equipment and emergency procedures: | Avoid dispersal of dust in the air (i.e., cleaning dust surfaces with compressed air.) Avoid breathing dust. Powder may become slippery when wet. For personal protection see section 8. |
| Methods and material for containment and clean up: | Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Sweep, vacuum or shovel into suitable containers for disposal. Non-sparking tools should be used. Wash down water is not recommended. Powder may become slippery when wet. |
| Environmental procedures: | See Section 12 for additional Ecological Information. |
| Reference to other sections: | Section 8: Personal Protection Section 12: Ecological Information |

SECTION 7 - HANDLING AND STORAGE

| | |
|--------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Precautions for safe handling: | Handle in accordance with good industrial hygiene and safety practice. Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powdered material can build static electricity when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmosphere. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment if release of airborne dust is expected. |
| Conditions for safe storage including any incompatibilities: | Store at less than 25°C, in tightly closed containers. Keep out of direct sunlight. Store in dry environment away from heat and sources of ignition, i.e., steam pipes, radiant heaters, hot air vents or welding sparks. Do not store with strong smelling materials. Incompatible products: oxidizing agents, strong acids. |

SAFETY DATA SHEET (SDS)

Carrageenan - Pg 4

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SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

| Control parameters: | |
|-------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Occupational exposure limits: | This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies. |
| Appropriate engineering controls: | It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in the handling of this product contain explosion relief vents or an explosion suppression or an oxygen-deficient environment. Use only appropriately classified electrical equipment and powered industrial trucks. |
| Individual protection measures, such as personal protective equipment: | |
| Eye/face protection: | Safety glasses. |
| Skin protection: | Minimize skin contamination by following good industrial hygiene practices. |
| Hand protection: | Use protective gloves if extended exposure is anticipated. |
| Other protective equipment: | Handle in accordance with good industrial hygiene and safety practice. |
| General information: | Protective engineering solutions should be implemented and in use. These recommendations apply to the product as supplied. If the product is used in mixtures, contact an appropriate protective equipment supplier or industrial hygienist for more information. |
| Respiratory protection: | If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. |

SAFETY DATA SHEET (SDS)

Carrageenan - Pg 5

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SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

| General information: | |
|----------------------------------------------------------------|---------------------------------|
| Appearance and physical state: | Dry powder, free flowing powder |
| Color: | Off-white |
| Type of Odor: | Slight marine |
| Odor threshold: | No information available |
| Important health, safety and environmental information: | |
| Initial Boiling Point and Boiling Range: | No information available |
| Melting Point/Freezing Point: | Not applicable |
| 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): | No information available |
| Octanol/Water Partition Coefficient (log Pow): | No information available |
| Specific Gravity: | No information available |
| Bulk Density: | No information available |
| Water Solubility: | 10% maximum (% by weight) |
| pH: | 7.0 - 10.5 |
| Viscosity: | No information available |
| Explosive Properties: | No information available |
| Oxidizing Properties: | No information available |
| Molecular Formula: | No information available |
| Molecular Weight: | No information available |
| Relative Density: | No information available |
| K_{st} : | >0 bar m/s |

SECTION 10 - STABILITY AND REACTIVITY

| | |
|-------------------------------------|------------------------------------------------------------|
| Reactivity: | Not applicable |
| Stability: | Stable under recommended storage conditions. |
| Possibility of hazardous reactions: | None under normal processing. |
| Hazardous polymerization: | Hazardous polymerization does not occur. |
| Conditions to avoid: | Dust formation. Excessive heat. Humid air. Sparks. |
| Incompatible materials: | Oxidizing agents/ Strong acids. |
| Hazardous decomposition products: | Burning produces obnoxious and toxic fumes: Sulfur oxides. |

SAFETY DATA SHEET (SDS)

Carrageenan - Pg 6

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SECTION 11 - TOXICOLOGICAL INFORMATION

| | |
|---------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| Information on toxicological effects: | |
| Acute toxicity (list all possible routes of exposure) | |
| Acute Oral Toxicity: | 5,400 mg/kg (Rat) |
| Acute Dermal Toxicity: | --- |
| Acute Inhalation Toxicity: | >0.93 mg/l (4h) (Rat)* * No mortality was observed at the maximum attainable concentration. |
| Skin Corrosion/irritation: | --- |
| Serious Eye Damage / Eye Irritation: | --- |
| Respiratory or Skin Sensitization: | Not expected to be sensitizing based on the components. |
| Germ Cell Mutagenicity: | No known mutagenic or teratogenic effects. |
| Carcinogenicity: | Contains no ingredient listed as a carcinogen. |
| Reproductive Toxicity: | This product does not contain any known or suspected reproductive hazards. |
| Specific Target Organ Toxicity - single exposure (STOT-se): | None known. |
| Specific Target Organ Toxicity - repeated exposure (STOT-re): | None noted in chronic animal studies. |
| Aspiration Hazard: | Aspiration may cause chemical pneumonitis. Excessive inhalation of dust can mechanically impede respiration. |
| Potential Health Effects: | |
| Skin Contact: | --- |
| Eye Contact: | --- |
| Ingestion: | --- |
| Inhalation: | --- |
| Chronic Health Effects: | Product does not present a chronic toxicity hazard based on known or supplied information. |
| Additional Data: | --- |

SECTION 12 - ECOLOGICAL INFORMATION

| | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| Toxicity: | |
| The environmental impact of this product has not been fully investigated. Carrageenan is an extract of seaweeds of the class Rhodophyceae (red seaweeds). | |
| Persistence and degradability: | Expected to biodegrade, based on component information. |
| Bioaccumulative potential: | Bioaccumulation is unlikely. |
| Mobility in soil: | No information available. |
| Other adverse effects: | None known. |

SAFETY DATA SHEET (SDS)

Carrageenan - Pg 7

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SECTION 13 - DISPOSAL CONSIDERATIONS

| Waste treatment methods: | |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Disposal: | This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements. |
| Container Disposal: | Dispose of in accordance with federal, state and local 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 |

SECTION 15 - REGULATORY INFORMATION

| Safety, health and environmental regulations/legislation specific for the substance or mixture: | | |
|--------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| U.S. Federal Regulations: | | |
| SARA 313: Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). | This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372. | |
| SARA 311/312 Hazard Categories: | Acute health hazard: | No |
| | Chronic health hazard: | No |
| | Fire hazard: | No |
| | Sudden release of pressure hazard: | No |
| | Reactive hazard: | No |
| Clean Water Act: | This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42). | |
| CERCLA: | This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material. | |
| US State Regulations: | | |
| California Proposition 65: | This product does NOT contain any Proposition 65 chemicals. | |
| U.S. State Right-to-Know Regulations: | This product does not contain any substances regulated by state right-to-know regulations. | |

SAFETY DATA SHEET (SDS)

Carrageenan - Pg 8

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SECTION 15 - REGULATORY INFORMATION

| | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| International Inventories: | |
| <i>A food additive, drug, cosmetic, or device, when manufactured, processed or distributed in commerce for use as a food additive, drug, cosmetic, or device is not subject to the notification requirements of 40 CFR 720.</i> | |
| TSCA (United States): | X |
| DSL (Canada): | X |
| EINECS/ELINCS (Europe): | X |
| ENCS (Japan): | - |
| IECSC (China): | X |
| KECL (Korea): | - |
| PICCS (Philippines): | X |
| AICS (Australia): | X |
| Mexico - Grade: | Minimum risk, Grade 0 |
| WHMIS Statement: | This product has been classified in accordance with the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR. |
| WHMIS Class: | See section 2 for more information. |

SECTION 16 - OTHER INFORMATION

| | |
|-------------------------------------------------------------------------------------------------------|----|
| HMIS Hazard ID: | |
| Health: | I |
| Flammability: | I |
| Physical Hazard: | 0 |
| Personal Protection: | X |
| NFPA Hazard ID: | |
| Health: | I |
| Flammability: | I |
| Instability: | 0 |
| Special Hazards: | -- |
| 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: 03/02/2018

SAFETY DATA SHEET (SDS)

Carrageenan - Pg 9

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National Chemical Inventories:

All components of this product are listed on the following chemical substance inventories: TSCA (USA)

| | |
|--------|-------------------|
| DSL | (Canada) |
| EINECS | (Europe) |
| ENCS | (Japan) ECL |
| | (Korea) |
| AICS | (Australia) NZIoC |
| | (New Zealand) |
| PICCS | (Philippines) |
| IECSC | (China) |

SAFETY DATA SHEET (SDS)

Carrageenan - Pg 10

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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 |
| PBT | 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 | Wassergefährdungsklasse (Water Hazard Class) WHMIS Workplace Hazardous Material Identification System |

SAFETY DATA SHEET (SDS)



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Synthetic Gall - Pg 1

Revision Date: 08/26/2019

SECTION 1 - CHEMICAL, PRODUCT & COMPANY INFORMATION

| | | |
|----------------------|----------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| Product Name: | SYNTHETIC GALL | |
| Product Number/Code: | JMA1200 / JMA2200 / JMA4200 | |
| Recommended Use: | Textile auxiliary | |
| Restrictions on use: | None known | |
| Manufacturer: | Rupert, Gibbon & Spider, Inc. 1147 Healdsburg Ave. Healdsburg, CA 95448 1-800-442-0455 / 707-433-9577 | |
| Emergency Number: | ChemTel, Inc. - Contract #MIS9128344 | |
| | North America: 1-800-255-3924 | International: 1-813-248-0585 |

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 | | |
| Physical Hazards: | | |
| Health Hazards: | Skin Sensitizer | Category 1B |
| | Eye Irritant | Category 2B |
| | Skin Irritant | Category 3 |
| | Oral Toxicity | Category 5 |
| Environmental Hazards: | | |

Label Elements

| | | |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Pictogram: | | |
| Signal Words: | Warning | |
| Hazard Statements-EU: | H315 Causes mild skin irritation. H320 Causes eye irritation. H303 May be harmful if swallowed. H412 Harmful to aquatic life with long-lasting effects. | |

SAFETY DATA SHEET (SDS)

Synthetic Gall - Pg 2

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| Precautionary Statements-EU: | |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Prevention: | P264 Wash face, hands, and any exposed skin thoroughly after handling. P280 Wear protective gloves/ protective clothing/eye protection/face protection. P270 Do not eat, drink, or smoke when using this product. P260 Do not breath dust/fume/gas/mist/vapors/spray. |
| Response: | P305+P351+P338 IF IN EYES: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 If eye irritation persists: Get medical advice/attention. P302+P352 IF ON SKIN:Wash with plenty of soap and water for 15 minutes. P332+P313 If skin irritation occurs: Get medical advice/attention. P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a comfortable position for breathing. |
| Storage: | P273: Avoid release to the environment. |
| Disposal: | P501: Dispose of contents/container in accordance with local/regional/ international regulations. |
| Hazard(s) not otherwise classified: | |

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

| Chemical identity | Content in percent (%)* | CAS # |
|-------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------------------------------|
| Proprietary textile mixture - Eye and skin irritant. - May be harmful if swallowed. | 0.1-10% | The exact percentages and composition has been withheld as a trade secret. |

SECTION 4 - FIRST AID MEASURES

| Description of first aid measures: | |
|-----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| General information: | Immediately remove all contaminated clothing. |
| In the event of skin contact: | Remove all contaminated clothing immediately.Wash immediately with soap and plenty of water. If a temporary skin reaction occurs, it should be treated as allergic contact dermatitis. Launder contaminated clothing before reuse. |
| In the event of eye contact: | Wash immediately with large amounts of water for 15 minutes, lifting the upper and lower lids until no evidence of product remain. Get medical attention immediately. Do not wear contact lenses while handling. |
| In the event of swallowing: | Induce vomiting by giving 2 glasses of water and place finger down throat. Get medical attention. Never give fluids or induce vomiting if patient is unconscious or has convulsions. |
| In the event of exposure by inhalation: | If inhaled, remove to fresh air. If not breathing, give artificial respiration, preferably mouth to mouth. If breathing is difficult, give oxygen. Call a physician. |
| Most important symptoms and effects, acute and delayed: | The most significant symptoms and effects are described in the labelling (see section 2) and/or in section 11. |
| Indication of any immediate medical attention and special treatment needed: | No data available |

SAFETY DATA SHEET (SDS)

Synthetic Gall - Pg 3

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SECTION 5 - FIREFIGHTING MEASURES

| | |
|--------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Flash point: | 530°F |
| Extinguishing media: | CO2, Dry Chemical, Foam, Water, Fog |
| Special firefighting procedures/unusual fire or explosion hazards: | Firefighters should be equipped with protective clothing & self-contained breathing apparatus to protect against potentially toxic & irritating fumes. In case of fire or explosion, keep unnecessary people away. Isolate hazard area & any entry. Stay upwind, out of low areas, and ventilate closed spaces before entering. |
| Additional information: | Avoid dusting conditions. May form explosive dust mixtures with air. |

SECTION 6 - ACCIDENTAL RELEASE MEASURES

| | |
|----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Personal precautions, protective equipment and emergency procedures: | Do not touch or walk through the spilled material: stop leak if you can do it without risk. |
| Methods and material for containment and clean up: | Take up with sand or other non-combustible absorbent material or suitable vacuum and place into labeled sealable containers. |
| Environmental procedures: | Do not empty into drains or waters. |
| Reference to other sections: | For further disposal measures see section 13. |

SECTION 7 - HANDLING AND STORAGE

| | |
|--------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Precautions for safe handling: | In accord with good industrial practice. Handle with care and avoid personal contact. |
| Conditions for safe storage including any incompatibilities: | Keep container protected from direct sunlight in a dry, cool and in a well-ventilated area. Keep the container tightly sealed and away from any incompatible materials (see Section 10). |

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

| | |
|-------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Control parameters: | |
| Occupational exposure limits: | Avoid contact with eyes and skin. Immediately remove all contaminated clothing. |
| Appropriate engineering controls: | Handle with good industrial practices and industrial hygiene. Wash hands after use. |
| Individual protection measures, such as personal protective equipment: | |
| Eye/face protection: | Employees should wear protective eye-goggles with side protection shield. |
| Skin protection: | Employees should avoid skin contact by wearing protective clothing. Long sleeve shirts, pants, gloves e.g. of PVC or nitrile rubber, and boots are recommended. Additional protections such as impervious suits are recommended when the potential for dermal contact is significant. Employees should wash their hands and face before eating and drinking and shower thoroughly before leaving work. Keep away from food and drink stuffs. |
| Hand protection: | Gloves |
| Other protective equipment: | Wear overalls, apron or other protective clothing. |
| Environmental exposure controls: | Use local ventilation. |
| Respiratory protection: | Inhalation of dust and aerosols must be absolutely prevented by the use of a NIOSH approved dust respirator. |

SAFETY DATA SHEET (SDS)

Synthetic Gall - Pg 4

Rupert, Gibbon & Spider, Inc. | P.O. Box 425 | Healdsburg, CA 95448 | 800.442.0455 | Fax: 707.433.4906 | www.jacquardproducts.com

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

| General information: | |
|----------------------------------------------------------------|-----------------|
| Appearance and physical state: | Liquid |
| Color: | Clear |
| Type of Odor: | Nearly odorless |
| Odor threshold: | N/D |
| Important health, safety and environmental information: | |
| Initial Boiling Point and Boiling Range: | N/D |
| Melting Point/Freezing Point: | N/D |
| Flammability Classification: | Non combustible |
| Flash Point: | 212°F/100°C |
| Auto-ignition Temperature: | N/D |
| Decomposition Temperature: | N/D |
| Flammability Limits (lower/upper): | N/A |
| Evaporation rate: | N/D |
| Vapor Pressure: | N/D |
| Vapor Density (Air=1): | N/D |
| Octanol/Water Partition Coefficient (log Pow): | N/D |
| Specific Gravity: | 1.04 |
| Bulk Density: | N/A |
| Water Solubility: | Dispersible |
| pH: | N/D |
| Viscosity: | N/D |
| Explosive Properties: | N/A |
| Oxidizing Properties: | N/A |
| Molecular Formula: | N/A |
| Molecular Weight: | N/A |
| Relative Density: | N/A |
| % Volatile: | N/D |

SECTION 10 - STABILITY AND REACTIVITY

| | |
|-------------------------------------|------------------------------------------------------|
| Reactivity: | Will not occur |
| Stability: | Stable |
| Possibility of hazardous reactions: | None expected |
| Conditions to avoid: | N/D |
| Incompatible materials: | Strong oxidizing agents |
| Hazardous decomposition products: | CO ₂ , CO, Sulfur oxides, Nitrogen oxides |

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SECTION 11 - TOXICOLOGICAL INFORMATION

| | |
|-------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Information on toxicological effects: | |
| Acute toxicity (list all possible routes of exposure) | |
| Acute Oral Toxicity: | LD50 (ingestion) - No data |
| Acute Dermal Toxicity: | No data |
| Skin Corrosion/irritation: | No data |
| Serious Eye Damage / Eye Irritation: | No data |
| Respiratory or Skin Sensitization: | Not expected |
| Carcinogen status (IARC/NTP/OSHA): | No |
| Signs and symptoms of overexposure: | Irritating to the eyes. Prolonged skin contact may cause irritation. Ingestion may cause nausea, vomiting, or diarrhea. Inhalation may cause irritation of the nose, throat, and upper respiratory tract. |
| Medical conditions aggravated: | Persons with any pre-existing skin, eye or respiratory condition may be more susceptible to the effects of this product. |
| Primary routes of exposure: | |
| Skin absorption: | No |
| Eye contact: | Yes |
| Ingestion: | Yes |
| Inhalation: | No |
| Skin contact: | Yes |

SECTION 12 - ECOLOGICAL INFORMATION

| | |
|--------------------|-----|
| Biodegradability: | N/D |
| Bacteria toxicity: | N/D |
| COD: | N/D |
| AOX: | N/D |

SECTION 13 - DISPOSAL CONSIDERATIONS

| | |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Waste treatment methods: | |
| Disposal: | If utilization or recycling of the product is not possible, it should be disposed of in accordance with existing federal, state and local environmental regulations, e.g. by incineration in a suitable plant. |
| Container Disposal: | Soiled, empty containers are to be treated in the same way as the contents. |

SECTION 14 - TRANSPORT INFORMATION

| | |
|------------------------------|----------------------------|
| Proper Shipping Description: | Non-hazardous ink material |
| DOT Hazard Classification: | Not regulated |
| Fr. Class Package: | 55 |
| IATA: | Non-regulated |
| IMDG: | Non-regulated |

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SECTION 15 - REGULATORY INFORMATION

| | | |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------|-----|
| US Regulations: | | |
| TSCA: | The components of this product are listed on the TSCA Inventory. | |
| SARA 313: | This product is not subject to SARA Title III Section 313 reporting requirements under 40 CFR 372. | |
| SARA 312: | Immediate (Acute) health hazard: | Yes |
| | Delayed (chronic) health hazard: | No |
| | Fire hazard: | No |
| | Sudden release of pressure: | No |
| | Reactivity: | No |
| California Proposition 65: | This product does NOT contain any components currently on the California List of Known Carcinogens and reproductive Toxins. | |

SECTION 16 - OTHER INFORMATION

| | |
|-------------------------------------------------------------------------------------------------------|---|
| HMIS Hazard ID: | |
| Health: | I |
| Flammability: | I |
| Reactivity: | 0 |
| 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: 08/26/2019

| | |
|-------------------------------------------------------------------------------------------------------|-------------------|
| National Chemical Inventories: | |
| All components of this product are listed on the following chemical substance inventories: TSCA (USA) | |
| DSL | (Canada) |
| EINECS | (Europe) |
| ENCS | (Japan) ECL |
| | (Korea) |
| AICS | (Australia) NZIoC |
| | (New Zealand) |
| PICCS | (Philippines) |
| IECSC | (China) |

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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 |
| PBT | 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 | Wassergefährdungsklasse (Water Hazard Class) WHMIS Workplace Hazardous Material Identification System |