30415-1009

SAFETY DATA SHEET



Revision Number 1

Revision date 01-Feb-2024

1. Identification

Product identifier

Product Name Semi-Moist Underglaze - Purple

Other means of identification

Product Code(s) FG00728

Synonyms 41417N, 01694M

Recommended use of the chemical and restrictions on use

Recommended use Restrictions on use

Details of the supplier of the safety data sheet

Manufacturer Address

American Art Clay Co Inc 6060 Guion Road Indianapolis, IN 46254-1222 USA Toll Free: 1-800-999-5456 CustomerCare@Amaco.com

Emergency telephone number

Emergency Telephone U.S. Poison Control 1-800-222-1222

2. Hazard(s) identification

Classification

Acute toxicity - Oral	Category 4
Carcinogenicity	Category 1B
Specific target organ toxicity (repeated exposure)	Category 2

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Hazard statements
Danger

Page 1/11

Item Numbers: 30415-1009 Page 1 of 84

Revision date 01-Feb-2024

H302 - Harmful if swallowed

H350 - May cause cancer

H373 - May cause damage to organs through prolonged or repeated exposure



Physical state Solid

Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Wear protective gloves/clothing and eye/face protection

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Do not breathe dust/fume/gas/mist/vapors/spray

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell

Rinse mouth

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Unknown acute toxicity

199.4 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

Other information

Harmful to aquatic life with long lasting effects. Toxic to aquatic life.

3. Composition/information on ingredients

Not applicable.

Mixture

Chemical name	CAS No	Weight-%
C.I. Pigment Red 233	68187-12-2	10 - 20
Quartz	14808-60-7	10 - 20
Kaolin	1332-58-7	10 - 20
Frits, chemicals	65997-18-4	10 - 20
C.I. Pigment Blue 73	68187-40-6	1 - <3
1,2,3-Propanetriol	56-81-5	1 - <3

4. First-aid measures

Description of first aid measures

General advice

Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get medical advice/attention.

Page 2/11

Item Numbers: 30415-1009 Page 2 of 84

Revision date 01-Feb-2024

Inhalation Remove to fresh air.

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Eye contact

Consult a physician.

Skin contact Wash skin with soap and water.

Ingestion Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious

person. Call a physician.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the

surrounding environment.

CAUTION: Use of water spray when fighting fire may be inefficient. Large Fire

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the

chemical

No information available.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Special protective equipment and

precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Use personal protective equipment as required. Evacuate

personnel to safe areas.

Refer to protective measures listed in Sections 7 and 8. Other information

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so. Methods for cleaning up Pick up and transfer to properly labeled containers.

7. Handling and storage

Precautions for safe handling

Page 3 of 84 Item Numbers: 30415-1009

Revision date 01-Feb-2024

Advice on safe handling

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children

8. Exposure controls/personal protection

Control parameters

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
C.I. Pigment Red 233 68187-12-2	-	TWA: 0.5 mg/m³ Cr (vacated) TWA: 0.5 mg/m³ Cr	IDLH: 25 mg/m³ Cr(III) TWA: 0.5 mg/m³ Cr
Quartz 14808-60-7	TWA: 0.025 mg/m³ respirable particulate matter	TWA: 50 μg/m ³ (vacated) TWA: 0.1 mg/m ³ respirable dust : (250)/(%SiO2 + 5) mppcf TWA respirable fraction : (10)/(%SiO2 + 2) mg/m ³ TWA respirable fraction	IDLH: 50 mg/m³ respirable dust TWA: 0.05 mg/m³ respirable dust
Kaolin 1332-58-7	TWA: 2 mg/m³ particulate matter containing no asbestos and <1% crystalline silica, respirable particulate matter	TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction (vacated) TWA: 10 mg/m³ total dust (vacated) TWA: 5 mg/m³ respirable fraction	TWA: 10 mg/m³ total dust TWA: 5 mg/m³ respirable dust
Frits, chemicals 65997-18-4	STEL: 10 mg/m³ Zr TWA: 0.01 mg/m³ As TWA: 0.05 mg/m³ Pb TWA: 0.01 mg/m³ Cd TWA: 0.002 mg/m³ Cd respirable particulate matter TWA: 0.5 mg/m³ Sb TWA: 1 mg/m³ Cu dust and mist TWA: 3 mg/m³ W respirable particulate matter in the absence of cobalt TWA: 5 mg/m³ Zr TWA: 0.02 mg/m³ Mn respirable particulate matter TWA: 0.1 mg/m³ Mn inhalable particulate matter	TWA: 10 µg/m³ As TWA: 50 µg/m³ Pb TWA: 0.5 mg/m³ Sb TWA: 5 mg/m³ Zr (vacated) TWA: 0.5 mg/m³ Sb (vacated) TWA: 5 mg/m³ Zr (vacated) TWA: 5 mg/m³ Zr (vacated) STEL: 10 mg/m³ Zr (vacated) Ceiling: 5 mg/m³ Ceiling: 5 mg/m³ Mn	IDLH: 5 mg/m³ As IDLH: 9 mg/m³ Cd dust and fume IDLH: 50 mg/m³ Cd dust and mist IDLH: 100 mg/m³ Cu dust and mist IDLH: 5500 mg/m³ Mn IDLH: 25 mg/m³ Zr IDLH: 100 mg/m³ Pb IDLH: 100 mg/m³ Ni Ceiling: 0.002 mg/m³ As 15 min Ceiling: 0.05 mg/m³ V dust and fume 15 min TWA: 0.5 mg/m³ Sb TWA: 1 mg/m³ Cu dust and mist TWA: 1 mg/m³ Mn TWA: 5 mg/m³ except Zirconium tetrachloride Zr TWA: 0.050 mg/m³ Pb TWA: 0.015 mg/m³ except Nickel carbonyl Ni STEL: 3 mg/m³ Mn STEL: 10 mg/m³ Zr
C.I. Pigment Blue 73 68187-40-6	TWA: 0.02 mg/m³ Co inhalable particulate matter	-	-
1,2,3-Propanetriol 56-81-5	-	TWA: 15 mg/m³ mist, total particulate TWA: 5 mg/m³ mist, respirable fraction	-

Item Numbers: 30415-1009 Page 4 of 84

Revision date 01-Feb-2024

(vacated) TWA: 10 mg/m³ mist,
total particulate
(vacated) TWA: 5 mg/m³ mist,
respirable fraction

Biological occupational exposure limits

Chemical name	ACGIH	
Frits, chemicals	200 μg/L - blood (Lead) - not critical	
65997-18-4	5 μg/g creatinine - urine (Cadmium) - not critical	
	5 μg/L - blood (Cadmium) - not critical	
C.I. Pigment Blue 73	15 μg/L - urine (Cobalt) - end of shift at end of workweek	
68187-40-6		

Appropriate engineering controls

Engineering controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection No special protective equipment required.

Hand protection Wear suitable gloves.

Skin and body protection Wear suitable protective clothing.

exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Do not eat, drink or smoke when using this product. Wash hands before breaks and

immediately after handling the product.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Solid

Appearance Color

Odor

Odor threshold

Duamant.	Values	Damania Mathad
<u>Property</u>	<u>Values</u>	Remarks • Method
pH	No data available	None known
Melting point / freezing point	No data available	None known
Initial boiling point and boiling rang	eNo data available	None known
Flash point	No data available	None known
Evaporation rate	No data available	None known
Flammability	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive	No data available	
limits		
Lower flammability or explosive	No data available	
limits		
Vapor pressure	No data available	None known
Relative vapor density	No data available	None known
Relative density	No data available	None known
Water solubility	No data available	None known

ltem Numbers: 30415-1009 Page 5 of 84

Revision date 01-Feb-2024

Solubility(ies) No data available None known No data available None known Partition coefficient Autoignition temperature No data available None known **Decomposition temperature** None known Kinematic viscosity No data available None known **Dynamic viscosity** No data available None known

Other information Explosive properties

Explosive properties

Oxidizing properties

VOC Content (%)

No information available
No information available
No information available

10. Stability and reactivity

Reactivity No information available.

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions None under normal processing.

Conditions to avoid None known based on information supplied.

Incompatible materials None known based on information supplied.

Hazardous decomposition products None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

InhalationSpecific test data for the substance or mixture is not available.Eye contactSpecific test data for the substance or mixture is not available.Skin contactSpecific test data for the substance or mixture is not available.

Ingestion Specific test data for the substance or mixture is not available. Harmful if swallowed. (based

on components).

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Acute toxicity

Numerical measures of toxicity

No information available

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 915.10 mg/kg
ATEmix (dermal) 13,054.80 mg/kg
ATEmix (inhalation-dust/mist) 12.90 mg/l

Unknown acute toxicity

199.4 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
C.I. Pigment Red 233	-	-	> 5.4 mg/L (Rat) 4 h
68187-12-2			

Page 6 / 11

Revision date 01-Feb-2024

Kaolin 1332-58-7	> 5000 mg/kg (Rat)	> 5000 mg/kg (Rat)	-
Frits, chemicals 65997-18-4	> 2000 mg/kg (Rat)	> 2000 mg/kg (Rat)	-
C.I. Pigment Blue 73 68187-40-6	-	-	= 5.3 mg/L (Rat) 4 h > 5.3 mg/L (Rat) 4 h
1,2,3-Propanetriol 56-81-5	= 12600 mg/kg (Rat)	> 10 g/kg (Rabbit)	> 2.75 mg/L (Rat) 4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritationNo information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity Contains a known or suspected carcinogen. Classification based on data available for

ingredients. May cause cancer.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
C.I. Pigment Red 233 68187-12-2	-	Group 3	-	-
Quartz 14808-60-7	A2	Group 1	Known	Х
Frits, chemicals 65997-18-4	A1 A3 A2	Group 1 Group 2B Group 2A	Known Reasonably Anticipated	Х
C.I. Pigment Blue 73 68187-40-6	А3	Group 2B	Reasonably Anticipated	Х

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A1 - Known Human Carcinogen

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

Group 3 - Not Classifiable as to Carcinogenicity in Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure.

Revision date 01-Feb-2024

Liver, Kidney, Respiratory system, Eyes, Skin, Central nervous system, Blood, Central Vascular System (CVS), Lungs, Nasal Cavities, Lymphatic System, prostate, Target organ effects

Gastrointestinal tract (GI).

Aspiration hazard No information available.

Other adverse effects

Interactive effects

12. Ecological information

Ecotoxicity

Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
1,2,3-Propanetriol	-	LC50: 51 - 57mL/L (96h,	=	-
56-81-5		Oncorhynchus mykiss)		

Persistence and degradability

Bioaccumulation

Component Information

Chemical name	Partition coefficient
1,2,3-Propanetriol	-1.76
56-81-5	

Other adverse effects No information available.

13. Disposal considerations

Disposal methods

Waste from residues/unused

products

Dispose of waste in accordance with environmental legislation. Dispose of in accordance

with local regulations.

Contaminated packaging

Do not reuse empty containers.

California Hazardous Waste Status

This product contains one or more substances that are listed with the State of California as

a hazardous waste.

14. Transport information

DOT Not regulated

Page 8 of 84 Item Numbers: 30415-1009

Revision date 01-Feb-2024

15. Regulatory information

International Inventories

TSCA

Contact supplier for inventory compliance status.

Chemical name	CAS No	US TSCA Inventory listing	US TSCA inactive/active designation
Corn syrup	8029-43-4	Present	Active
Water	7732-18-5	Present	Active
C.I. Pigment Red 233	68187-12-2	Present	Active
Kaolin	1332-58-7	Present	Active
Quartz	14808-60-7	Present	Active
Dextrin	9004-53-9	Present	Active
Frits, chemicals	65997-18-4	Present	Active
Feldspar	68476-25-5	Present	Active
C.I. Pigment Blue 73	68187-40-6	Present	Active
1,2,3-Propanetriol	56-81-5	Present	Active
Benzoic acid, 4-hydroxy-, methyl ester	99-76-3	Present	Active

DSL/NDSL Contact supplier for inventory compliance status. **EINECS/ELINCS** Contact supplier for inventory compliance status. **ENCS** Contact supplier for inventory compliance status. Contact supplier for inventory compliance status. **IECSC KECL** Contact supplier for inventory compliance status. **PICCS** Contact supplier for inventory compliance status. AIIC Contact supplier for inventory compliance status. **NZIoC** Contact supplier for inventory compliance status.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AIIC - Australian Inventory of Industrial Chemicals

NZIoC - New Zealand Inventory of Chemicals

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	ne SARA 313 - Threshold Values %	
C.I. Pigment Red 233 - 68187-12-2	1.0	
Frits, chemicals - 65997-18-4	0.1	
	1.0	
C.I. Pigment Blue 73 - 68187-40-6	0.1	

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Revision date 01-Feb-2024

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
C.I. Pigment Red 233 68187-12-2	-	X	-	-
Frits, chemicals 65997-18-4	-	X	-	-

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

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Water 7732-18-5	-	-	X
C.I. Pigment Red 233 68187-12-2	X	-	X
Kaolin 1332-58-7	Х	X	X
Quartz 14808-60-7	X	X	X
Frits, chemicals 65997-18-4	Χ	-	X
Feldspar 68476-25-5	Х	-	X
C.I. Pigment Blue 73 68187-40-6	Х	-	Х
1,2,3-Propanetriol 56-81-5	Х	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA Health hazards 1 Flammability 0 Instability 0 Special hazards - Hallth hazards * 2 Flammability 0 Physical hazards 0 Personal protection X

Chronic Hazard Star Legend *= Chronic Health Hazard

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

Legend Section 8: Exposure controls/personal protection

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value * Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Revision date 01-Feb-2024

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

National Institute of Technology and Evaluation (NITE)

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)
National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications

Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

World Health Organization

Revision date Revision Note

Disclaimer

01-Feb-2024

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

SAFETY DATA SHEET



Revision Number 1

Revision date 01-Feb-2024

1. Identification

Product identifier

Product Name Semi-Moist Underglaze - Light Blue

Other means of identification

Product Code(s) FG00717

Synonyms 41418P, 01685C

Recommended use of the chemical and restrictions on use

Recommended use Restrictions on use

Details of the supplier of the safety data sheet

Manufacturer Address

American Art Clay Co Inc 6060 Guion Road Indianapolis, IN 46254-1222 USA Toll Free: 1-800-999-5456 CustomerCare@Amaco.com

Emergency telephone number

Emergency Telephone U.S. Poison Control 1-800-222-1222

2. Hazard(s) identification

Classification

Acute toxicity - Oral	Category 4
Carcinogenicity	Category 1B
Specific target organ toxicity (repeated exposure)	Category 2

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Hazard	statements
Danger	

Page 1/11

Item Numbers: 30415-1009 Page 12 of 84

Revision date 01-Feb-2024

H302 - Harmful if swallowed

H350 - May cause cancer

H373 - May cause damage to organs through prolonged or repeated exposure



Physical state Solid

Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Wear protective gloves/clothing and eye/face protection

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Do not breathe dust/fume/gas/mist/vapors/spray

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell

Rinse mouth

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Unknown acute toxicity

180.8 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

Other information

Harmful to aquatic life with long lasting effects. Toxic to aquatic life.

3. Composition/information on ingredients

Not applicable.

Mixture

Chemical name	CAS No	Weight-%
Quartz	14808-60-7	10 - 20
Kaolin	1332-58-7	10 - 20
Frits, chemicals	65997-18-4	5 - <10
Zircon	14940-68-2	5 - <10
1,2,3-Propanetriol	56-81-5	1 - <3
C.I. Pigment Blue 28	1345-16-0	0.1 - 1

4. First-aid measures

Description of first aid measures

General advice

Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get medical advice/attention.

Page 2/11

Item Numbers: 30415-1009 Page 13 of 84

Revision date 01-Feb-2024

Inhalation Remove to fresh air.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

Skin contact Wash skin with soap and water.

Ingestion Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious

person. Call a physician.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

5. Fire-fighting measures

surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the

chemical

No information available.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Special protective equipment and

precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Use personal protective equipment as required. Evacuate

personnel to safe areas.

Other information Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for containmentPrevent further leakage or spillage if safe to do so.Methods for cleaning upPick up and transfer to properly labeled containers.

7. Handling and storage

Precautions for safe handling

Page 3/11

Item Numbers: 30415-1009 Page 14 of 84

Revision date 01-Feb-2024

Advice on safe handling

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children

8. Exposure controls/personal protection

Control parameters

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL NIOSH	
Quartz	TWA: 0.025 mg/m³ respirable	TWA: 50 µg/m³	IDLH: 50 mg/m³ respirable dust
14808-60-7	particulate matter	(vacated) TWA: 0.1 mg/m ³	TWA: 0.05 mg/m³ respirable
		respirable dust	dust
		: (250)/(%SiO2 + 5) mppcf	
		TWA respirable fraction	
		: (10)/(%SiO2 + 2) mg/m ³	
		TWA respirable fraction	
Kaolin	TWA: 2 mg/m³ particulate	TWA: 15 mg/m³ total dust	TWA: 10 mg/m³ total dust
1332-58-7	matter containing no asbestos	TWA: 5 mg/m³ respirable	TWA: 5 mg/m³ respirable dust
	and <1% crystalline silica,	fraction	
	respirable particulate matter	(vacated) TWA: 10 mg/m³ total	
		dust	
		(vacated) TWA: 5 mg/m ³	
	0.751 10 / 0.7	respirable fraction	15111.5
Frits, chemicals	STEL: 10 mg/m³ Zr	TWA: 10 μg/m³ As	IDLH: 5 mg/m³ As
65997-18-4	TWA: 0.01 mg/m ³ As	TWA: 50 μg/m³ Pb	IDLH: 9 mg/m³ Cd dust and
	TWA: 0.05 mg/m ³ Pb	TWA: 0.5 mg/m³ Sb	fume
	TWA: 0.01 mg/m ³ Cd TWA: 0.002 mg/m ³ Cd	TWA: 5 mg/m³ Zr (vacated) TWA: 0.5 mg/m³ Sb	IDLH: 50 mg/m ³ Sb IDLH: 100 mg/m ³ Cu dust and
	respirable particulate matter	(vacated) TWA: 0.5 mg/m ³ Sr	mist
	TWA: 0.5 mg/m ³ Sb	(vacated) STEL: 10 mg/m³ Zr	IDLH: 500 mg/m³ Mn
	TWA: 1 mg/m³ Cu dust and mist	(vacated) STEE: 10 Hig/Hi ² ZI	IDLH: 25 mg/m³ Zr
	TWA: 3 mg/m ³ W respirable	Ceiling: 5 mg/m ³ Mn	IDLH: 100 mg/m³ Pb
	particulate matter in the absence		IDLH: 10 mg/m³ Ni
	of cobalt		Ceiling: 0.002 mg/m³ As 15 min
	TWA: 5 mg/m³ Zr		Ceiling: 0.05 mg/m³ V dust and
	TWA: 0.02 mg/m3 Mn respirable		fume 15 min
	particulate matter		TWA: 0.5 mg/m ³ Sb
	TWA: 0.1 mg/m ³ Mn inhalable		TWA: 1 mg/m ³ Cu dust and
	particulate matter		mist
			TWA: 1 mg/m³ Mn
			TWA: 5 mg/m³ except Zirconium
			tetrachloride Zr
			TWA: 0.050 mg/m ³ Pb
			TWA: 0.015 mg/m³ except
			Nickel carbonyl Ni
			STEL: 3 mg/m³ Mn
			STEL: 10 mg/m³ Zr
Zircon	STEL: 10 mg/m³ Zr	TWA: 5 mg/m³ Zr	IDLH: 25 mg/m³ Zr
14940-68-2	TWA: 5 mg/m ³ Zr	(vacated) TWA: 5 mg/m³ Zr	TWA: 5 mg/m³ except Zirconium
		(vacated) STEL: 10 mg/m³ Zr	tetrachloride Zr
			STEL: 10 mg/m³ Zr
1,2,3-Propanetriol	-	TWA: 15 mg/m³ mist, total	-
56-81-5		particulate	
		TWA: 5 mg/m³ mist, respirable	
		fraction	

Item Numbers: 30415-1009 Page 15 of 84

Revision date 01-Feb-2024

		(vacated) TWA: 10 mg/m³ mist, total particulate (vacated) TWA: 5 mg/m³ mist, respirable fraction	
C.I. Pigment Blue 28 1345-16-0	TWA: 0.02 mg/m³ Co inhalable particulate matter TWA: 1 mg/m³ respirable particulate matter	-	-

Biological occupational exposure limits

Chemical name	ACGIH
Frits, chemicals	200 μg/L - blood (Lead) - not critical
65997-18-4	5 μg/g creatinine - urine (Cadmium) - not critical
	5 μg/L - blood (Cadmium) - not critical
C.I. Pigment Blue 28	15 μg/L - urine (Cobalt) - end of shift at end of workweek
1345-16-0	

Appropriate engineering controls

Engineering controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

No special protective equipment required. Eye/face protection

Hand protection Wear suitable gloves.

Wear suitable protective clothing. Skin and body protection

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.

Do not eat, drink or smoke when using this product. Wash hands before breaks and General hygiene considerations

immediately after handling the product.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Solid

Appearance Color

Odor

Odor threshold

Remarks • Method **Property** <u>Values</u>

No data available None known Melting point / freezing point No data available None known Initial boiling point and boiling rangeNo data available None known Flash point No data available None known No data available None known **Evaporation rate** Flammability No data available None known Flammability Limit in Air None known

Upper flammability or explosive

No data available Lower flammability or explosive No data available

limits

Revision date 01-Feb-2024

Vapor pressure	No data available	None known
Relative vapor density	No data available	None known
Relative density	No data available	None known
Water solubility	No data available	None known
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature		None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known

Other information

Explosive properties

Oxidizing properties

VOC Content (%)

No information available
No information available

10. Stability and reactivity

Reactivity No information available.

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions None under normal processing.

Conditions to avoid

None known based on information supplied.

Incompatible materials

None known based on information supplied.

Hazardous decomposition products

None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

InhalationSpecific test data for the substance or mixture is not available.Eye contactSpecific test data for the substance or mixture is not available.Skin contactSpecific test data for the substance or mixture is not available.

Ingestion Specific test data for the substance or mixture is not available. Harmful if swallowed. (based

on components).

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Acute toxicity

Numerical measures of toxicity

No information available

The following values are calculated based on chapter 3.1 of the GHS document

 ATEmix (oral)
 998.10 mg/kg

 ATEmix (dermal)
 14,044.90 mg/kg

 ATEmix (inhalation-dust/mist)
 14.10 mg/l

Unknown acute toxicity

180.8 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

Item Numbers: 30415-1009 Page 17 of 84

Revision date 01-Feb-2024

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Kaolin 1332-58-7	> 5000 mg/kg (Rat)	> 5000 mg/kg (Rat)	-
Frits, chemicals 65997-18-4	> 2000 mg/kg (Rat)	> 2000 mg/kg (Rat)	-
1,2,3-Propanetriol 56-81-5	= 12600 mg/kg (Rat)	> 10 g/kg (Rabbit)	> 2.75 mg/L (Rat)4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No information available.

No information available. Serious eye damage/eye irritation

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity Contains a known or suspected carcinogen. Classification based on data available for

ingredients. May cause cancer.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Quartz	A2	Group 1	Known	X
14808-60-7				
Frits, chemicals	A1	Group 1	Known	X
65997-18-4	A3	Group 2B	Reasonably Anticipated	
	A2	Group 2A	·	
C.I. Pigment Blue 28	A3	Group 2B	Reasonably Anticipated	X
1345-16-0		-		

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A1 - Known Human Carcinogen

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans Group 2B - Possibly Carcinogenic to Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure.

Liver, Kidney, Respiratory system, Eyes, Skin, Central nervous system, Blood, Central Target organ effects

Vascular System (CVS), Lungs, Nasal Cavities, Lymphatic System, prostate,

Page 7/11

Page 18 of 84 Item Numbers: 30415-1009

Revision date 01-Feb-2024

Gastrointestinal tract (GI).

Aspiration hazard

No information available.

Other adverse effects

Interactive effects

12. Ecological information

Ecotoxicity

Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
1,2,3-Propanetriol	-	LC50: 51 - 57mL/L (96h,	-	-
56-81-5		Oncorhynchus mykiss)		

Persistence and degradability

Bioaccumulation

Component Information

Chemical name	Partition coefficient
1,2,3-Propanetriol	-1.76
56-81-5	

Other adverse effects

No information available.

13. Disposal considerations

Disposal methods

Waste from residues/unused products

Dispose of waste in accordance with environmental legislation. Dispose of in accordance

with local regulations.

Contaminated packaging

Do not reuse empty containers.

California Hazardous Waste Status

This product contains one or more substances that are listed with the State of California as

a hazardous waste.

14. Transport information

DOT Not regulated

15. Regulatory information

International Inventories

Page 8/11

Item Numbers: 30415-1009 Page 19 of 84

Revision date 01-Feb-2024

TSCA

Contact supplier for inventory compliance status.

Chemical name	CAS No	US TSCA Inventory listing	US TSCA inactive/active designation
Corn syrup	8029-43-4	Present	Active
Water	7732-18-5	Present	Active
Kaolin	1332-58-7	Present	Active
Quartz	14808-60-7	Present	Active
Dextrin	9004-53-9	Present	Active
Frits, chemicals	65997-18-4	Present	Active
Feldspar	68476-25-5	Present	Active
Zircon	14940-68-2	Present	Active
1,2,3-Propanetriol	56-81-5	Present	Active
C.I. Pigment Blue 28	1345-16-0	Present	Active
Benzoic acid, 4-hydroxy-, methyl ester	99-76-3	Present	Active

DSL/NDSL Contact supplier for inventory compliance status. Contact supplier for inventory compliance status. **EINECS/ELINCS** Contact supplier for inventory compliance status. **ENCS IECSC** Contact supplier for inventory compliance status. **KECL** Contact supplier for inventory compliance status. **PICCS** Contact supplier for inventory compliance status. AIIC Contact supplier for inventory compliance status. **NZIoC** Contact supplier for inventory compliance status.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AIIC - Australian Inventory of Industrial Chemicals

NZIoC - New Zealand Inventory of Chemicals

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %
Frits, chemicals - 65997-18-4	0.1
	1.0
C.I. Pigment Blue 28 - 1345-16-0	0.1

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical name	CWA - Reportable	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous
	Quantities			Substances
Frits, chemicals	-	X	-	-

Page 9/11

Item Numbers: 30415-1009 Page 20 of 84

Revision date 01-Feb-2024

03337-10-4

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

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Water 7732-18-5	-	-	X
Kaolin 1332-58-7	Х	X	X
Quartz 14808-60-7	X	X	X
Frits, chemicals 65997-18-4	X	-	X
Feldspar 68476-25-5	X	-	X
1,2,3-Propanetriol 56-81-5	X	X	X
C.I. Pigment Blue 28 1345-16-0	Х	-	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

Health hazards 1 Instability 0 **NFPA** Flammability 0 Special hazards -Health hazards * 2 Flammability 0 **HMIS** Physical hazards 0 Personal protection X = Chronic Health Hazard _____ Chronic Hazard Star Legend

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

Legend Section 8: Exposure controls/personal protection TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

National Institute of Technology and Evaluation (NITE)

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)

Revision date 01-Feb-2024

National Toxicology Program (NTP) New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications

Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

World Health Organization

Revision date Revision Note 01-Feb-2024

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

SAFETY DATA SHEET



Revision Number 1

Revision date 01-Feb-2024

1. Identification

Product identifier

Product Name Semi-Moist Underglaze - Aqua

Other means of identification

Product Code(s) FG00739

Synonyms 41419B, 01674B

Recommended use of the chemical and restrictions on use

Recommended use Restrictions on use

Details of the supplier of the safety data sheet

Manufacturer Address

American Art Clay Co Inc 6060 Guion Road Indianapolis, IN 46254-1222 USA Toll Free: 1-800-999-5456 CustomerCare@Amaco.com

Emergency telephone number

Emergency Telephone U.S. Poison Control 1-800-222-1222

2. Hazard(s) identification

Classification

Acute toxicity - Oral	Category 4
Specific target organ toxicity (repeated exposure)	Category 2

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Hazard statements Warning

Page 1/10

Item Numbers: 30415-1009 Page 23 of 84

Revision date 01-Feb-2024

H302 - Harmful if swallowed

H373 - May cause damage to organs through prolonged or repeated exposure



Physical state Solid

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Do not breathe dust/fume/gas/mist/vapors/spray

Precautionary Statements - Response

Get medical advice/attention if you feel unwell

IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell

Rinse mouth

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Unknown acute toxicity

170.6 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

Other information

Harmful to aquatic life with long lasting effects. Toxic to aquatic life.

3. Composition/information on ingredients

Not applicable.

Mixture

Chemical name	CAS No	Weight-%
C.I. Pigment Green 51	68553-01-5	10 - 20
Frits, chemicals	65997-18-4	5 - <10
Quartz	14808-60-7	5 - <10
Kaolin	1332-58-7	5 - <10
1.2.3-Propanetriol	56-81-5	1 - <3

4. First-aid measures

Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance.

Inhalation Remove to fresh air.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

Skin contact Wash skin with soap and water.

Ingestion Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious

Item Numbers: 30415-1009 Page 24 of 84

Revision date 01-Feb-2024

person. Call a physician.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

5. Fire-fighting measures

surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the

chemical

No information available.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Use personal protective equipment as required. Evacuate

personnel to safe areas.

Other information Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for containmentPrevent further leakage or spillage if safe to do so.Methods for cleaning upPick up and transfer to properly labeled containers.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Ensure adequate

ventilation.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach

of children.

Item Numbers: 30415-1009 Page 25 of 84

Revision date 01-Feb-2024

8. Exposure controls/personal protection

Control parameters

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
C.I. Pigment Green 51	-	TWA: 0.5 mg/m ³ Cr	IDLH: 25 mg/m ³ Cr(III)
68553-01-5		(vacated) TWA: 0.5 mg/m³ Cr	TWA: 0.5 mg/m ³ Cr
Frits, chemicals	STEL: 10 mg/m³ Zr	TWA: 10 µg/m³ As	IDLH: 5 mg/m ³ As
65997-18-4	TWA: 0.01 mg/m³ As	TWA: 50 µg/m³ Pb	IDLH: 9 mg/m³ Cd dust and
	TWA: 0.05 mg/m ³ Pb	TWA: 0.5 mg/m ³ Sb	fume
	TWA: 0.01 mg/m ³ Cd	TWA: 5 mg/m³ Zr	IDLH: 50 mg/m ³ Sb
	TWA: 0.002 mg/m ³ Cd	(vacated) TWA: 0.5 mg/m³ Sb	IDLH: 100 mg/m³ Cu dust and
	respirable particulate matter	(vacated) TWA: 5 mg/m³ Zr	mist
	TWA: 0.5 mg/m ³ Sb	(vacated) STEL: 10 mg/m³ Zr	IDLH: 500 mg/m³ Mn
	TWA: 1 mg/m³ Cu dust and mist		IDLH: 25 mg/m³ Zr
	TWA: 3 mg/m³ W respirable	Ceiling: 5 mg/m³ Mn	IDLH: 100 mg/m³ Pb
	particulate matter in the absence		IDLH: 10 mg/m³ Ni
	of cobalt		Ceiling: 0.002 mg/m³ As 15 min
	TWA: 5 mg/m³ Zr TWA: 0.02 mg/m³ Mn respirable		Ceiling: 0.05 mg/m³ V dust and fume 15 min
	particulate matter		TWA: 0.5 mg/m ³ Sb
	TWA: 0.1 mg/m³ Mn inhalable		TWA: 0.5 mg/m ³ Sb
	particulate matter		mist
	particulate matter		TWA: 1 mg/m³ Mn
			TWA: 5 mg/m³ except Zirconium
			tetrachloride Zr
			TWA: 0.050 mg/m ³ Pb
			TWA: 0.015 mg/m³ except
			Nickel carbonyl Ni
			STEL: 3 mg/m³ Mn
			STEL: 10 mg/m³ Zr
Quartz	TWA: 0.025 mg/m³ respirable	TWA: 50 μg/m³	IDLH: 50 mg/m³ respirable dust
14808-60-7	particulate matter	(vacated) TWA: 0.1 mg/m ³	TWA: 0.05 mg/m³ respirable
		respirable dust	dust
		: (250)/(%SiO2 + 5) mppcf	
		TWA respirable fraction	
		: (10)/(%SiO2 + 2) mg/m ³	
Kaolin	TMA. 2 mg/m3 nortio::lata	TWA respirable fraction TWA: 15 mg/m³ total dust	TMA: 10 mg/m3 total disat
1332-58-7	TWA: 2 mg/m³ particulate matter containing no asbestos	TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable	TWA: 10 mg/m³ total dust TWA: 5 mg/m³ respirable dust
1332-36-7	and <1% crystalline silica,	fraction	TVA. 5 mg/m² Tespirable dust
	respirable particulate matter	(vacated) TWA: 10 mg/m³ total	
	respirable particulate matter	dust	
		(vacated) TWA: 5 mg/m ³	
		respirable fraction	
1,2,3-Propanetriol	-	TWA: 15 mg/m³ mist, total	-
56-81-5		particulate	
		TWA: 5 mg/m³ mist, respirable	
		fraction	
		(vacated) TWA: 10 mg/m ³ mist,	
		total particulate	
		(vacated) TWA: 5 mg/m³ mist,	
		respirable fraction	

Biological occupational exposure limits

Chemical name	ACGIH
Frits, chemicals	200 μg/L - blood (Lead) - not critical
65997-18-4	5 ug/g creatinine - urine (Cadmium) - not critical

Page 4 / 10

Item Numbers: 30415-1009 Page 26 of 84

Revision date 01-Feb-2024

5 μg/L - blood (Cadmium) - not critical

Appropriate engineering controls

Engineering controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection No special protective equipment required.

Skin and body protectionNo special protective equipment required.

exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Solid

Appearance Color

Odor

Odor threshold

Property	Values_	Remarks • Method
pH	No data available	None known
Melting point / freezing point	No data available	None known
Initial boiling point and boiling rang	eNo data available	None known
Flash point	No data available	None known
Evaporation rate	No data available	None known
Flammability	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive	No data available	
limits		
Lower flammability or explosive	No data available	
limits		

Vapor pressure No data available None known Relative vapor density No data available None known Relative density No data available None known Water solubility No data available None known Solubility(ies) No data available None known Partition coefficient No data available None known No data available None known **Autoignition temperature Decomposition temperature** None known No data available Kinematic viscosity None known **Dynamic viscosity** No data available None known

Other informationNo information availableExplosive propertiesNo information availableOxidizing propertiesNo information availableVOC Content (%)No information available

10. Stability and reactivity

Reactivity No information available.

Page 5/10

Item Numbers: 30415-1009 Page 27 of 84

Revision date 01-Feb-2024

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions None under normal processing.

Conditions to avoid None known based on information supplied.

Incompatible materials

None known based on information supplied.

Hazardous decomposition products None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

InhalationSpecific test data for the substance or mixture is not available.Eye contactSpecific test data for the substance or mixture is not available.

Skin contact Specific test data for the substance or mixture is not available.

Ingestion Specific test data for the substance or mixture is not available. Harmful if swallowed. (based

on components).

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Acute toxicity

Numerical measures of toxicity

No information available

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 1,048.70 mg/kg
ATEmix (dermal) 16,420.40 mg/kg
ATEmix (inhalation-dust/mist) 14.70 mg/l

Unknown acute toxicity

170.6 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Frits, chemicals 65997-18-4	> 2000 mg/kg (Rat)	> 2000 mg/kg (Rat)	-
Kaolin 1332-58-7	> 5000 mg/kg (Rat)	> 5000 mg/kg (Rat)	-
1,2,3-Propanetriol 56-81-5	= 12600 mg/kg (Rat)	> 10 g/kg(Rabbit)	> 2.75 mg/L (Rat) 4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Item Numbers: 30415-1009 Page 28 of 84

Revision date 01-Feb-2024

Germ cell mutagenicity

No information available.

No information available.

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
C.I. Pigment Green 51	-	Group 3	-	-
68553-01-5				
Frits, chemicals	A1	Group 1	Known	X
65997-18-4	A3	Group 2B	Reasonably Anticipated	
	A2	Group 2A	·	
Quartz	A2	Group 1	Known	X
14808-60-7				

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A1 - Known Human Carcinogen

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

Group 3 - Not Classifiable as to Carcinogenicity in Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure.

Target organ effects Liver, Kidney, Respiratory system, Eyes, Skin, Central nervous system, Blood, Central

Vascular System (CVS), Lungs, Nasal Cavities, Lymphatic System, prostate,

Gastrointestinal tract (GI).

Aspiration hazard No information available.

Other adverse effects

Interactive effects

12. Ecological information

Ecotoxicity

Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
1,2,3-Propanetriol 56-81-5	-	LC50: 51 - 57mL/L (96h, Oncorhynchus mykiss)	-	-

Revision date 01-Feb-2024

Persistence and degradability

Bioaccumulation

Component Information

Chemical name	Partition coefficient
1,2,3-Propanetriol	-1.76
56-81-5	

Other adverse effects No information available.

13. Disposal considerations

Disposal methods

Waste from residues/unused

products

Dispose of waste in accordance with environmental legislation. Dispose of in accordance

with local regulations.

Contaminated packaging

Do not reuse empty containers.

California Hazardous Waste Status

This product contains one or more substances that are listed with the State of California as

a hazardous waste.

14. Transport information

DOT Not regulated

15. Regulatory information

International Inventories

TSCA Contact supplier for inventory compliance status.

Chemical name	CAS No	US TSCA Inventory listing	US TSCA inactive/active designation
Corn syrup	8029-43-4	Present	Active
Water	7732-18-5	Present	Active
C.I. Pigment Green 51	68553-01-5	Present	Inactive
Dextrin	9004-53-9	Present	Active
Frits, chemicals	65997-18-4	Present	Active
Feldspar	68476-25-5	Present	Active
Kaolin	1332-58-7	Present	Active
Quartz	14808-60-7	Present	Active
1,2,3-Propanetriol	56-81-5	Present	Active
Benzoic acid, 4-hydroxy-, methyl ester	99-76-3	Present	Active

Item Numbers: 30415-1009 Page 30 of 84

Revision date 01-Feb-2024

DSL/NDSL Contact supplier for inventory compliance status. **EINECS/ELINCS** Contact supplier for inventory compliance status. **ENCS** Contact supplier for inventory compliance status.

IECSC Contact supplier for inventory compliance status. **KECL** Contact supplier for inventory compliance status. **PICCS** Contact supplier for inventory compliance status. Contact supplier for inventory compliance status. AIIC **NZIoC** Contact supplier for inventory compliance status.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

- Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AIIC - Australian Inventory of Industrial Chemicals

NZIoC - New Zealand Inventory of Chemicals

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %	
C.I. Pigment Green 51 - 68553-01-5	1.0	
Frits, chemicals - 65997-18-4	0.1	
	1.0	

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
C.I. Pigment Green 51 68553-01-5	-	X	-	-
Frits, chemicals 65997-18-4	-	X	-	-

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

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Water	-	-	X
7732-18-5			
C.I. Pigment Green 51	X	-	X

Page 9/10

Revision date 01-Feb-2024

68553-01-5			
Frits, chemicals 65997-18-4	X	-	X
Feldspar 68476-25-5	X	-	X
Kaolin 1332-58-7	X	Х	Х
Quartz 14808-60-7	X	X	X
1,2,3-Propanetriol 56-81-5	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA Health hazards 1 Flammability 0 Instability 0 Special hazards -HMIS Health hazards * 2 Flammability 0 Physical hazards 0 Personal protection X

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

Legend Section 8: Exposure controls/personal protection

TWA (time-weighted average) STEL (Short Term Exposure Limit) STEL

Ceiling Maximum limit value Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

EPA (Environmental Protection Agency) Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

National Institute of Technology and Evaluation (NITE)

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications

Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

World Health Organization

Revision date 01-Feb-2024 **Revision Note**

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

SAFETY DATA SHEET



Revision Number 1

Revision date 01-Feb-2024

1. Identification

Product identifier

Product Name Semi-Moist Underglaze - Rose

Other means of identification

Product Code(s) FG00731

Synonyms 41420R, 01695N

Recommended use of the chemical and restrictions on use

Recommended use Restrictions on use

Details of the supplier of the safety data sheet

Manufacturer Address

American Art Clay Co Inc 6060 Guion Road Indianapolis, IN 46254-1222 USA Toll Free: 1-800-999-5456 CustomerCare@Amaco.com

Emergency telephone number

Emergency Telephone U.S. Poison Control 1-800-222-1222

2. Hazard(s) identification

Classification

Acute toxicity - Oral	Category 4
Specific target organ toxicity (repeated exposure)	Category 2

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Hazard statements Warning

Page 1/10

Item Numbers: 30415-1009 Page 33 of 84

FG00731 - Semi-Moist Underglaze - Rose

Revision date 01-Feb-2024

H302 - Harmful if swallowed

H373 - May cause damage to organs through prolonged or repeated exposure



Physical state Solid

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Do not breathe dust/fume/gas/mist/vapors/spray

Precautionary Statements - Response

Get medical advice/attention if you feel unwell IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell Rinse mouth

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Unknown acute toxicity

203.64 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

Other information

Harmful to aquatic life with long lasting effects. Toxic to aquatic life.

3. Composition/information on ingredients

Not applicable.

Mixture

Chemical name	CAS No	Weight-%
C.I. Pigment Red 233	68187-12-2	20 - 40
Quartz	14808-60-7	5 - <10
Kaolin	1332-58-7	5 - <10
Frits, chemicals	65997-18-4	5 - <10
1.2.3-Propanetriol	56-81-5	1 - <3

4. First-aid measures

Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance.

Inhalation Remove to fresh air.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

Skin contact Wash skin with soap and water.

Ingestion Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious

Page 2/10

Item Numbers: 30415-1009 Page 34 of 84

FG00731 - Semi-Moist Underglaze - Rose

Revision date 01-Feb-2024

person. Call a physician.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

5. Fire-fighting measures

surrounding environment. **Large Fire**CAUTION: Use of water s

CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the

chemical

No information available.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Use personal protective equipment as required. Evacuate

personnel to safe areas.

Other information Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for containmentPrevent further leakage or spillage if safe to do so.Methods for cleaning upPick up and transfer to properly labeled containers.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Ensure adequate

ventilation.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach

of children.

Item Numbers: 30415-1009 Page 35 of 84

FG00731 - Semi-Moist Underglaze - Rose

Revision date 01-Feb-2024

8. Exposure controls/personal protection

Control parameters

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
C.I. Pigment Red 233	-	TWA: 0.5 mg/m ³ Cr	IDLH: 25 mg/m³ Cr(III)
68187-12-2		(vacated) TWA: 0.5 mg/m ³ Cr	TWA: 0.5 mg/m ³ Cr
Quartz	TWA: 0.025 mg/m ³ respirable	TWA: 50 μg/m ³	IDLH: 50 mg/m³ respirable dust
14808-60-7	particulate matter	(vacated) TWA: 0.1 mg/m ³	TWA: 0.05 mg/m ³ respirable
		respirable dust	dust
		: (250)/(%SiO2 + 5) mppcf	
		TWA respirable fraction	
		: (10)/(%SiO2 + 2) mg/m ³ TWA respirable fraction	
Kaolin	TWA: 2 mg/m³ particulate	TWA: 15 mg/m³ total dust	TWA: 10 mg/m³ total dust
1332-58-7	matter containing no asbestos	TWA: 13 mg/m³ total dust	TWA: 10 mg/m³ total dust TWA: 5 mg/m³ respirable dust
1332-36-7	and <1% crystalline silica,	fraction	TWA. 5 mg/m Tespilable dust
	respirable particulate matter	(vacated) TWA: 10 mg/m³ total	
	Toophablo particulate matter	dust	
		(vacated) TWA: 5 mg/m ³	
		respirable fraction	
Frits, chemicals	STEL: 10 mg/m³ Zr	TWA: 10 μg/m³ As	IDLH: 5 mg/m ³ As
65997-18-4	TWA: 0.01 mg/m ³ As	TWA: 50 µg/m³ Pb	IDLH: 9 mg/m³ Cd dust and
	TWA: 0.05 mg/m ³ Pb	TWA: 0.5 mg/m ³ Sb	fume
	TWA: 0.01 mg/m ³ Cd	TWA: 5 mg/m³ Zr	IDLH: 50 mg/m³ Sb
	TWA: 0.002 mg/m ³ Cd	(vacated) TWA: 0.5 mg/m ³ Sb	IDLH: 100 mg/m³ Cu dust and
	respirable particulate matter	(vacated) TWA: 5 mg/m³ Zr	mist
	TWA: 0.5 mg/m ³ Sb	(vacated) STEL: 10 mg/m³ Zr	IDLH: 500 mg/m³ Mn
	TWA: 1 mg/m³ Cu dust and mist	(vacated) Ceiling: 5 mg/m ³	IDLH: 25 mg/m³ Zr
	TWA: 3 mg/m ³ W respirable particulate matter in the absence	Ceiling: 5 mg/m³ Mn	IDLH: 100 mg/m³ Pb IDLH: 10 mg/m³ Ni
	of cobalt		Ceiling: 0.002 mg/m³ As 15 min
	TWA: 5 mg/m ³ Zr		Ceiling: 0.002 mg/m³ V dust and
	TWA: 0.02 mg/m ³ Mn respirable		fume 15 min
	particulate matter		TWA: 0.5 mg/m ³ Sb
	TWA: 0.1 mg/m ³ Mn inhalable		TWA: 1 mg/m³ Cu dust and
	particulate matter		mist
	· .		TWA: 1 mg/m³ Mn
			TWA: 5 mg/m³ except Zirconium
			tetrachloride Zr
			TWA: 0.050 mg/m ³ Pb
			TWA: 0.015 mg/m³ except
			Nickel carbonyl Ni
			STEL: 3 mg/m³ Mn
1.2.2 Propositio		TWA: 15 mg/m³ mist, total	STEL: 10 mg/m³ Zr
1,2,3-Propanetriol 56-81-5	-	particulate	-
30-01-3		TWA: 5 mg/m³ mist, respirable	
		fraction	
		(vacated) TWA: 10 mg/m³ mist,	
		total particulate	
		(vacated) TWA: 5 mg/m³ mist,	
		respirable fraction	

Biological occupational exposure limits

Chemical name	ACGIH
Frits, chemicals	200 μg/L - blood (Lead) - not critical
65997-18-4	5 ug/g creatinine - urine (Cadmium) - not critical

Page 4/10

Item Numbers: 30415-1009 Page 36 of 84

Revision date 01-Feb-2024

5 μg/L - blood (Cadmium) - not critical

Appropriate engineering controls

Engineering controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

No special protective equipment required. Eye/face protection

No special protective equipment required. Skin and body protection

No protective equipment is needed under normal use conditions. If exposure limits are Respiratory protection

exceeded or irritation is experienced, ventilation and evacuation may be required.

None known

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state

Appearance Color

Odor

Odor threshold

Property	<u>Values</u>	Remarks • Method
pH	No data available	None known
Melting point / freezing point	No data available	None known
Initial boiling point and boiling ra	angeNo data available	None known
Flash point	No data available	None known
Evaporation rate	No data available	None known
Flammability	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	ve No data available	

Lower flammability or explosive No data available

limits

Vapor pressure No data available Relative vapor density No data available Relative density No data available Water solubility No data available Solubility(ies) No data available Partition coefficient No data available

No data available **Autoignition temperature Decomposition temperature** No data available Kinematic viscosity **Dynamic viscosity** No data available

No information available No information available

No information available

10. Stability and reactivity

Other information **Explosive properties**

VOC Content (%)

Oxidizing properties

Reactivity No information available

Page 5/10

Page 37 of 84 Item Numbers: 30415-1009

Revision date 01-Feb-2024

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions None under normal processing.

Conditions to avoid None known based on information supplied.

Incompatible materials None known based on information supplied.

Hazardous decomposition products None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available.

Eye contact Specific test data for the substance or mixture is not available.

Skin contact Specific test data for the substance or mixture is not available.

Ingestion Specific test data for the substance or mixture is not available. Harmful if swallowed. (based

on components).

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Acute toxicity

Numerical measures of toxicity

No information available

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 1,136.90 mg/kg
ATEmix (dermal) 16,136.80 mg/kg
ATEmix (inhalation-dust/mist) 15.70 mg/l

Unknown acute toxicity

203.64 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
C.I. Pigment Red 233 68187-12-2	-	-	> 5.4 mg/L (Rat) 4 h
Kaolin 1332-58-7	> 5000 mg/kg (Rat)	> 5000 mg/kg (Rat)	-
Frits, chemicals 65997-18-4	> 2000 mg/kg (Rat)	> 2000 mg/kg (Rat)	-
1,2,3-Propanetriol 56-81-5	= 12600 mg/kg (Rat)	> 10 g/kg(Rabbit)	> 2.75 mg/L (Rat)4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritationNo information available.

Serious eye damage/eye irritation No information available.

Item Numbers: 30415-1009 Page 38 of 84

Revision date 01-Feb-2024

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
C.I. Pigment Red 233 68187-12-2	-	Group 3	-	-
Quartz 14808-60-7	A2	Group 1	Known	X
Frits, chemicals 65997-18-4	A1 A3 A2	Group 1 Group 2B Group 2A	Known Reasonably Anticipated	×

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A1 - Known Human Carcinogen

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

Group 3 - Not Classifiable as to Carcinogenicity in Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure.

Target organ effects Liver, Kidney, Respiratory system, Eyes, Skin, Central nervous system, Blood, Central

Vascular System (CVS), Lungs, Nasal Cavities, Lymphatic System, prostate,

Gastrointestinal tract (GI).

Aspiration hazard No information available.

Other adverse effects

Interactive effects

12. Ecological information

Ecotoxicity Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
1,2,3-Propanetriol	ı	LC50: 51 - 57mL/L (96h,	1	-

Item Numbers: 30415-1009 Page 39 of 84

Revision date 01-Feb-2024

56-81-5	Oncorhynchus mykiss)		
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Persistence and degradability

Bioaccumulation

Component Information

ouniperiori iniciniumon	
Chemical name	Partition coefficient
1,2,3-Propanetriol 56-81-5	-1.76

No information available. Other adverse effects

13. Disposal considerations

Disposal methods

Waste from residues/unused products

Dispose of waste in accordance with environmental legislation. Dispose of in accordance

with local regulations.

Contaminated packaging

Do not reuse empty containers.

California Hazardous Waste Status

This product contains one or more substances that are listed with the State of California as

a hazardous waste.

14. Transport information

DOT Not regulated

15. Regulatory information

International Inventories

TSCA Contact supplier for inventory compliance status.

Chemical name	CAS No	US TSCA Inventory listing	US TSCA inactive/active designation
Corn syrup	8029-43-4	Present	Active
C.I. Pigment Red 233	68187-12-2	Present	Active
Water	7732-18-5	Present	Active
Dextrin	9004-53-9	Present	Active
Frits, chemicals	65997-18-4	Present	Active
Feldspar	68476-25-5	Present	Active
Kaolin	1332-58-7	Present	Active
Quartz	14808-60-7	Present	Active
1,2,3-Propanetriol	56-81-5	Present	Active
Benzoic acid, 4-hydroxy-, methyl ester	99-76-3	Present	Active

Revision date 01-Feb-2024

DSL/NDSL Contact supplier for inventory compliance status. **EINECS/ELINCS** Contact supplier for inventory compliance status. Contact supplier for inventory compliance status. **ENCS IECSC** Contact supplier for inventory compliance status. Contact supplier for inventory compliance status. **KECL PICCS** Contact supplier for inventory compliance status. AIIC Contact supplier for inventory compliance status. **NZIoC** Contact supplier for inventory compliance status.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AIIC - Australian Inventory of Industrial Chemicals **NZIoC** - New Zealand Inventory of Chemicals

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %
C.I. Pigment Red 233 - 68187-12-2	1.0
Frits, chemicals - 65997-18-4	0.1
	1.0

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical na	ime	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
C.I. Pigment R 68187-12		-	X	-	-
Frits, chemic		-	X	-	-

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

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
C.I. Pigment Red 233	X	-	X

Item Numbers: 30415-1009 Page 41 of 84

Revision date 01-Feb-2024

68187-12-2			
Water 7732-18-5	-	-	Х
Frits, chemicals 65997-18-4	X	-	Х
Feldspar 68476-25-5	X	-	Х
Kaolin 1332-58-7	X	X	Х
Quartz 14808-60-7	Х	Х	Х
1,2,3-Propanetriol 56-81-5	X	Х	Х

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA Health hazards 1 Flammability 0 Instability 0 Special hazards -Health hazards * 2 Flammability 0 Physical hazards 0 Personal protection X HMIS

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

Legend Section 8: Exposure controls/personal protection

STEL (Short Term Exposure Limit) TWA TWA (time-weighted average) STEL

Ceiling Maximum limit value Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

National Institute of Technology and Evaluation (NITE)

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications

Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

World Health Organization

Revision date Revision Note

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01-Feb-2024

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End of Safety Data Sheet

SAFETY DATA SHEET



Revision Number 1

Revision date 01-Feb-2024

1. Identification

Product identifier

Product Name Semi-Moist Underglaze - Orange

Other means of identification

Product Code(s) FG00742

Synonyms 41421S, 01691J

Recommended use of the chemical and restrictions on use

Recommended use Restrictions on use

Details of the supplier of the safety data sheet

Manufacturer Address

American Art Clay Co Inc 6060 Guion Road Indianapolis, IN 46254-1222 USA Toll Free: 1-800-999-5456 CustomerCare@Amaco.com

Emergency telephone number

Emergency Telephone U.S. Poison Control 1-800-222-1222

2. Hazard(s) identification

Classification

Specific target organ toxicity (repeated exposure) Category 2

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Hazard statements

Warning

H373 - May cause damage to organs through prolonged or repeated exposure

Page 1/10

Item Numbers: 30415-1009 Page 43 of 84

Revision date 01-Feb-2024



Physical state Solid Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray

Precautionary Statements - Response

Get medical advice/attention if you feel unwell

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other information

May be harmful if swallowed. Harmful to aquatic life with long lasting effects. Toxic to aquatic life.

3. Composition/information on ingredients

Not applicable.

Mixture

Chemical name	CAS No	Weight-%
C.I. Pigment Brown 33	68186-88-9	40 - 60
Quartz	14808-60-7	3 - <5
Kaolin	1332-58-7	3 - <5
Frits, chemicals	65997-18-4	3 - <5
1,2,3-Propanetriol	56-81-5	1 - <3

4. First-aid measures

Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance.

Inhalation Remove to fresh air.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

Skin contact Wash skin with soap and water.

Ingestion Rinse mouth.

Most important symptoms and effects, both acute and delayed

No information available. **Symptoms**

Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Note to physicians

Page 44 of 84 Item Numbers: 30415-1009

Revision date 01-Feb-2024

5. Fire-fighting measures

surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the

chemical

No information available.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Use personal protective equipment as required. Evacuate

personnel to safe areas.

Other information Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for containmentPrevent further leakage or spillage if safe to do so.Methods for cleaning upPick up and transfer to properly labeled containers.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Ensure adequate

ventilation.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place.

8. Exposure controls/personal protection

Control parameters

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
C.I. Pigment Brown 33	=	TWA: 0.5 mg/m ³ Cr	IDLH: 25 mg/m ³ Cr(III)
68186-88-9		(vacated) TWA: 0.5 mg/m ³ Cr	TWA: 0.5 mg/m ³ Cr

Page 3/10

Item Numbers: 30415-1009 Page 45 of 84

Revision date 01-Feb-2024

Quartz 14808-60-7	TWA: 0.025 mg/m³ respirable particulate matter	TWA: 50 μg/m³ (vacated) TWA: 0.1 mg/m³ respirable dust : (250)/(%SiO2 + 5) mppcf TWA respirable fraction : (10)/(%SiO2 + 2) mg/m ³ TWA respirable fraction	IDLH: 50 mg/m³ respirable dust TWA: 0.05 mg/m³ respirable dust
Kaolin 1332-58-7	TWA: 2 mg/m³ particulate matter containing no asbestos and <1% crystalline silica, respirable particulate matter	TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction (vacated) TWA: 10 mg/m³ total dust (vacated) TWA: 5 mg/m³ respirable fraction	TWA: 10 mg/m³ total dust TWA: 5 mg/m³ respirable dust
Frits, chemicals 65997-18-4	STEL: 10 mg/m³ Zr TWA: 0.01 mg/m³ As TWA: 0.05 mg/m³ Pb TWA: 0.01 mg/m³ Cd TWA: 0.002 mg/m³ Cd respirable particulate matter TWA: 0.5 mg/m³ Sb TWA: 1 mg/m³ Cu dust and mist TWA: 3 mg/m³ W respirable particulate matter in the absence of cobalt TWA: 5 mg/m³ Zr TWA: 0.02 mg/m³ Mn respirable particulate matter TWA: 0.1 mg/m³ Mn inhalable particulate matter	TWA: 10 µg/m³ As TWA: 50 µg/m³ Pb TWA: 0.5 mg/m³ Sb TWA: 5 mg/m³ Zr (vacated) TWA: 0.5 mg/m³ Sb (vacated) TWA: 5 mg/m³ Zr (vacated) STEL: 10 mg/m³ Zr (vacated) Ceiling: 5 mg/m³ Ceiling: 5 mg/m³ Mn	IDLH: 5 mg/m³ As IDLH: 9 mg/m³ Cd dust and fume IDLH: 50 mg/m³ Cb dust and mist IDLH: 100 mg/m³ Cu dust and mist IDLH: 500 mg/m³ Mn IDLH: 5500 mg/m³ Mn IDLH: 25 mg/m³ Zr IDLH: 100 mg/m³ Pb IDLH: 10 mg/m³ Ni Ceiling: 0.002 mg/m³ As 15 min Ceiling: 0.002 mg/m³ As 15 min Ceiling: 0.05 mg/m³ Sb TWA: 1 mg/m³ Cu dust and mist TWA: 1 mg/m³ Cu dust and mist TWA: 1 mg/m³ Mn TWA: 5 mg/m³ except Zirconium tetrachloride Zr TWA: 0.050 mg/m³ Pb TWA: 0.015 mg/m³ except Nickel carbonyl Ni STEL: 3 mg/m³ Mn
1,2,3-Propanetriol 56-81-5	-	TWA: 15 mg/m³ mist, total particulate TWA: 5 mg/m³ mist, respirable fraction (vacated) TWA: 10 mg/m³ mist, total particulate (vacated) TWA: 5 mg/m³ mist, respirable fraction	-

Biological occupational exposure limits

Chemical name	ACGIH
Frits, chemicals	200 μg/L - blood (Lead) - not critical
65997-18-4	5 μg/g creatinine - urine (Cadmium) - not critical
	5 μg/L - blood (Cadmium) - not critical

Appropriate engineering controls

Engineering controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection No special protective equipment required.

Page 4 / 10

Revision date 01-Feb-2024

No special protective equipment required. Skin and body protection

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.

Handle in accordance with good industrial hygiene and safety practice. General hygiene considerations

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Solid

Appearance Color

Odor

Odor threshold

Property Values Remarks • Method No data available рΗ None known

Melting point / freezing point No data available None known Initial boiling point and boiling rangeNo data available None known No data available Flash point None known **Evaporation rate** No data available None known **Flammability** No data available None known Flammability Limit in Air None known

No data available

Upper flammability or explosive

limits

Lower flammability or explosive No data available

limits

Vapor pressure No data available None known Relative vapor density No data available None known Relative density No data available None known Water solubility No data available None known Solubility(ies) No data available None known Partition coefficient No data available None known **Autoignition temperature** No data available None known **Decomposition temperature** None known Kinematic viscosity No data available None known **Dynamic viscosity** No data available None known

Other information

Explosive properties No information available **Oxidizing properties** No information available VOC Content (%) No information available

10. Stability and reactivity

Reactivity No information available.

Stable under normal conditions. **Chemical stability** Possibility of hazardous reactions None under normal processing.

Conditions to avoid None known based on information supplied. Incompatible materials None known based on information supplied. Hazardous decomposition products None known based on information supplied.

Page 47 of 84 Item Numbers: 30415-1009

Revision date 01-Feb-2024

11. Toxicological information

Information on likely routes of exposure

InhalationSpecific test data for the substance or mixture is not available.Eye contactSpecific test data for the substance or mixture is not available.Skin contactSpecific test data for the substance or mixture is not available.

Ingestion May be harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Acute toxicity

Numerical measures of toxicity

No information available

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 2,269.30 mg/kg
ATEmix (dermal) 30,769.20 mg/kg
ATEmix (inhalation-dust/mist) 29.00 mg/l

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
C.I. Pigment Brown 33 68186-88-9	-	-	> 5.06 mg/L (Rat) 4 h
Kaolin 1332-58-7	> 5000 mg/kg (Rat)	> 5000 mg/kg (Rat)	-
Frits, chemicals 65997-18-4	> 2000 mg/kg (Rat)	> 2000 mg/kg (Rat)	-
1,2,3-Propanetriol 56-81-5	= 12600 mg/kg (Rat)	> 10 g/kg(Rabbit)	> 2.75 mg/L (Rat) 4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
C.I. Pigment Brown 33 68186-88-9	-	Group 3	-	-
Quartz 14808-60-7	A2	Group 1	Known	X
Frits, chemicals 65997-18-4	A1 A3 A2	Group 1 Group 2B Group 2A	Known Reasonably Anticipated	Х

Page 6/10

Revision date 01-Feb-2024

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A1 - Known Human Carcinogen

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans Group 2B - Possibly Carcinogenic to Humans

Group 3 - Not Classifiable as to Carcinogenicity in Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure.

Target organ effects Liver, Kidney, Respiratory system, Eyes, Skin, Central nervous system, Blood, Central

Vascular System (CVS), Lungs, Nasal Cavities, Lymphatic System, prostate,

Gastrointestinal tract (GI).

Aspiration hazard No information available.

Other adverse effects

Interactive effects

12. Ecological information

Ecotoxicity

Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
1,2,3-Propanetriol	-	LC50: 51 - 57mL/L (96h,	-	-
56-81-5		Oncorhynchus mykiss)		

Persistence and degradability

Bioaccumulation

Component Information

Chemical name	Partition coefficient
1,2,3-Propanetriol	-1.76
56-81-5	

Other adverse effects

No information available

Page 7/10

Revision date 01-Feb-2024

13. Disposal considerations

Disposal methods

Waste from residues/unused Dispose of waste in accordance with environmental legislation. Dispose of in accordance products

with local regulations.

Contaminated packaging Do not reuse empty containers.

California Hazardous Waste Status This product contains one or more substances that are listed with the State of California as

a hazardous waste.

14. Transport information

DOT Not regulated

15. Regulatory information

International Inventories

TSCA Contact supplier for inventory compliance status.

Chemical name	CAS No	US TSCA Inventory listing	US TSCA inactive/active designation
Corn syrup	8029-43-4	Present	Active
C.I. Pigment Brown 33	68186-88-9	Present	Active
Water	7732-18-5	Present	Active
Dextrin	9004-53-9	Present	Active
Feldspar	68476-25-5	Present	Active
Kaolin	1332-58-7	Present	Active
Quartz	14808-60-7	Present	Active
Frits, chemicals	65997-18-4	Present	Active
1,2,3-Propanetriol	56-81-5	Present	Active
Benzoic acid, 4-hydroxy-, methyl ester	99-76-3	Present	Active

DSL/NDSL Contact supplier for inventory compliance status. **EINECS/ELINCS** Contact supplier for inventory compliance status. Contact supplier for inventory compliance status. **ENCS IECSC** Contact supplier for inventory compliance status. **KECL** Contact supplier for inventory compliance status. **PICCS** Contact supplier for inventory compliance status. AIIC Contact supplier for inventory compliance status. **NZIoC** Contact supplier for inventory compliance status.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

Page 50 of 84 Item Numbers: 30415-1009

Revision date 01-Feb-2024

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AllC - Australian Inventory of Industrial Chemicals **NZIoC** - New Zealand Inventory of Chemicals

US Federal Regulations

<u>SARA 313</u>

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %
C.I. Pigment Brown 33 - 68186-88-9	1.0
Frits, chemicals - 65997-18-4	0.1
	1.0

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
C.I. Pigment Brown 33 68186-88-9	-	X	-	-
Frits, chemicals 65997-18-4	-	X	-	-

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

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
C.I. Pigment Brown 33 68186-88-9	Х	-	Х
Water 7732-18-5	-	-	Х
Feldspar 68476-25-5	Х	-	Х
Kaolin 1332-58-7	X	X	Х
Quartz 14808-60-7	X	X	Х
Frits, chemicals 65997-18-4	Х	-	X
1,2,3-Propanetriol 56-81-5	Х	X	Х

U.S. EPA Label Information

Item Numbers: 30415-1009 Page 51 of 84

Revision date 01-Feb-2024

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA
HMISHealth hazards1Flammability0Instability0Special hazards-HMISHealth hazards* 2 1Flammability0Physical hazards0Personal protectionX

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

Legend Section 8: Exposure controls/personal protection

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value * Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

EPA (Environmental Protection Agency)
Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

National Institute of Technology and Evaluation (NITE)

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications

Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

World Health Organization

Revision date 01-Feb-2024

Revision Note Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

Page 52 of 9.

SAFETY DATA SHEET



Revision Number 1

Revision date 01-Feb-2024

1. Identification

Product identifier

Product Name Semi-Moist Underglaze - Peach

Other means of identification

Product Code(s) RM00011
Synonyms 41422T

Recommended use of the chemical and restrictions on use

Recommended use Restrictions on use

Details of the supplier of the safety data sheet

Manufacturer Address

American Art Clay Co Inc 6060 Guion Road Indianapolis, IN 46254-1222 USA Toll Free: 1-800-999-5456 CustomerCare@Amaco.com

Emergency telephone number

Emergency Telephone U.S. Poison Control 1-800-222-1222

2. Hazard(s) identification

Classification

Specific target organ toxicity (repeated exposure)

Category 2

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Hazard statements

Warning

H373 - May cause damage to organs through prolonged or repeated exposure

Page 1/10

Item Numbers: 30415-1009 Page 53 of 84

Revision date 01-Feb-2024



Physical state Solid Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray

Precautionary Statements - Response

Get medical advice/attention if you feel unwell

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other information

May be harmful if swallowed. Harmful to aquatic life with long lasting effects. Toxic to aquatic life.

3. Composition/information on ingredients

Not applicable.

Mixture

Chemical name	CAS No	Weight-%
C.I. Pigment Brown 33	68186-88-9	40 - 60
Quartz	14808-60-7	3 - <5
Kaolin	1332-58-7	3 - <5
Frits, chemicals	65997-18-4	3 - <5
1,2,3-Propanetriol	56-81-5	1 - <3

4. First-aid measures

Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance.

Inhalation Remove to fresh air.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

Skin contact Wash skin with soap and water.

Ingestion Rinse mouth.

Most important symptoms and effects, both acute and delayed

No information available. **Symptoms**

Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Note to physicians

Page 54 of 84 Item Numbers: 30415-1009

Revision date 01-Feb-2024

5. Fire-fighting measures

surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing mediaDo not scatter spilled material with high pressure water streams.

Specific hazards arising from the

chemical

No information available.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Use personal protective equipment as required. Evacuate

personnel to safe areas.

Other information Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for containmentPrevent further leakage or spillage if safe to do so.Methods for cleaning upPick up and transfer to properly labeled containers.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Ensure adequate

ventilation.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place.

8. Exposure controls/personal protection

Control parameters

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
C.I. Pigment Brown 33	=	TWA: 0.5 mg/m ³ Cr	IDLH: 25 mg/m ³ Cr(III)
68186-88-9		(vacated) TWA: 0.5 mg/m ³ Cr	TWA: 0.5 mg/m ³ Cr

Page 3/10

Item Numbers: 30415-1009 Page 55 of 84

Revision date 01-Feb-2024

Quartz 14808-60-7	TWA: 0.025 mg/m³ respirable particulate matter	TWA: 50 μg/m³ (vacated) TWA: 0.1 mg/m³ respirable dust : (250)/(%SiO2 + 5) mppcf TWA respirable fraction : (10)/(%SiO2 + 2) mg/m ³ TWA respirable fraction	IDLH: 50 mg/m³ respirable dust TWA: 0.05 mg/m³ respirable dust
Kaolin 1332-58-7	TWA: 2 mg/m³ particulate matter containing no asbestos and <1% crystalline silica, respirable particulate matter	TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction (vacated) TWA: 10 mg/m³ total dust (vacated) TWA: 5 mg/m³ respirable fraction	TWA: 10 mg/m³ total dust TWA: 5 mg/m³ respirable dust
Frits, chemicals 65997-18-4	STEL: 10 mg/m³ Zr TWA: 0.01 mg/m³ As TWA: 0.05 mg/m³ Pb TWA: 0.01 mg/m³ Cd TWA: 0.002 mg/m³ Cd respirable particulate matter TWA: 0.5 mg/m³ Sb TWA: 1 mg/m³ Cu dust and mist TWA: 3 mg/m³ W respirable particulate matter in the absence of cobalt TWA: 5 mg/m³ Zr TWA: 0.02 mg/m³ Mn respirable particulate matter TWA: 0.1 mg/m³ Mn inhalable particulate matter	TWA: 10 µg/m³ As TWA: 50 µg/m³ Pb TWA: 0.5 mg/m³ Sb TWA: 5 mg/m³ Zr (vacated) TWA: 0.5 mg/m³ Zr (vacated) TWA: 5 mg/m³ Zr (vacated) STEL: 10 mg/m³ Zr (vacated) Ceiling: 5 mg/m³ Ceiling: 5 mg/m³ Mn	IDLH: 5 mg/m³ As IDLH: 9 mg/m³ Cd dust and fume IDLH: 50 mg/m³ Sb IDLH: 100 mg/m³ Cu dust and mist IDLH: 500 mg/m³ Mn IDLH: 500 mg/m³ Mn IDLH: 25 mg/m³ Zr IDLH: 100 mg/m³ Pb IDLH: 10 mg/m³ Ni Ceiling: 0.002 mg/m³ As 15 min Ceiling: 0.005 mg/m³ V dust and fume 15 min TWA: 0.5 mg/m³ Sb TWA: 1 mg/m³ Cu dust and mist TWA: 1 mg/m³ Mn TWA: 5 mg/m³ except Zirconium tetrachloride Zr TWA: 0.050 mg/m³ Pb TWA: 0.015 mg/m³ except Nickel carbonyl Ni STEL: 3 mg/m³ Mn STEL: 10 mg/m³ Zr
1,2,3-Propanetriol 56-81-5	-	TWA: 15 mg/m³ mist, total particulate TWA: 5 mg/m³ mist, respirable fraction (vacated) TWA: 10 mg/m³ mist, total particulate (vacated) TWA: 5 mg/m³ mist, respirable fraction	-

Biological occupational exposure limits

Chemical name	ACGIH
Frits, chemicals	200 μg/L - blood (Lead) - not critical
65997-18-4	5 μg/g creatinine - urine (Cadmium) - not critical
	5 μg/L - blood (Cadmium) - not critical

Appropriate engineering controls

Engineering controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection No special protective equipment required.

Item Numbers: 30415-1009 Page 56 of 84

Revision date 01-Feb-2024

Skin and body protection No special protective equipment required.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.

Handle in accordance with good industrial hygiene and safety practice. General hygiene considerations

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Solid

Appearance

Color Odor

Odor threshold

Property Values Remarks • Method

No data available рΗ None known Melting point / freezing point No data available None known Initial boiling point and boiling rangeNo data available None known No data available Flash point None known **Evaporation rate** No data available None known **Flammability** No data available None known Flammability Limit in Air None known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Vapor pressure No data available None known Relative vapor density No data available None known Relative density No data available None known Water solubility No data available None known Solubility(ies) No data available None known Partition coefficient No data available None known **Autoignition temperature** No data available None known **Decomposition temperature** None known Kinematic viscosity No data available None known **Dynamic viscosity** No data available None known

Other information

Explosive properties No information available **Oxidizing properties** No information available VOC Content (%) No information available

10. Stability and reactivity

Reactivity No information available.

Stable under normal conditions. **Chemical stability** Possibility of hazardous reactions None under normal processing.

Conditions to avoid None known based on information supplied. Incompatible materials None known based on information supplied. Hazardous decomposition products None known based on information supplied.

Page 57 of 84 Item Numbers: 30415-1009

Revision date 01-Feb-2024

11. Toxicological information

Information on likely routes of exposure

InhalationSpecific test data for the substance or mixture is not available.Eye contactSpecific test data for the substance or mixture is not available.Skin contactSpecific test data for the substance or mixture is not available.

Ingestion May be harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Acute toxicity

Numerical measures of toxicity

No information available

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 2,269.30 mg/kg
ATEmix (dermal) 30,769.20 mg/kg
ATEmix (inhalation-dust/mist) 29.00 mg/l

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
C.I. Pigment Brown 33 68186-88-9	-	-	> 5.06 mg/L (Rat) 4 h
Kaolin 1332-58-7	> 5000 mg/kg (Rat)	> 5000 mg/kg (Rat)	-
Frits, chemicals 65997-18-4	> 2000 mg/kg (Rat)	> 2000 mg/kg (Rat)	-
1,2,3-Propanetriol 56-81-5	= 12600 mg/kg (Rat)	> 10 g/kg (Rabbit)	> 2.75 mg/L (Rat) 4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
C.I. Pigment Brown 33 68186-88-9	-	Group 3	-	1
Quartz 14808-60-7	A2	Group 1	Known	Х
Frits, chemicals 65997-18-4	A1 A3 A2	Group 1 Group 2B Group 2A	Known Reasonably Anticipated	Х

Page 6 / 10

Item Numbers: 30415-1009 Page 58 of 84

Revision date 01-Feb-2024

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A1 - Known Human Carcinogen

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans Group 2B - Possibly Carcinogenic to Humans

Group 3 - Not Classifiable as to Carcinogenicity in Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure.

Target organ effects Liver, Kidney, Respiratory system, Eyes, Skin, Central nervous system, Blood, Central

Vascular System (CVS), Lungs, Nasal Cavities, Lymphatic System, prostate,

Gastrointestinal tract (GI).

Aspiration hazard No information available.

Other adverse effects

Interactive effects

12. Ecological information

Ecotoxicity

Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
1,2,3-Propanetriol	-	LC50: 51 - 57mL/L (96h,	-	-
56-81-5		Oncorhynchus mykiss)		

Persistence and degradability

Bioaccumulation

Component Information

Chemical name	Partition coefficient
1,2,3-Propanetriol	-1.76
56-81-5	

Other adverse effects No information available.

Item Numbers: 30415-1009 Page 59 of 84

Revision date 01-Feb-2024

13. Disposal considerations

Disposal methods

products

Waste from residues/unused Dispose of waste in accordance with environmental legislation. Dispose of in accordance

with local regulations.

Contaminated packaging Do not reuse empty containers.

California Hazardous Waste Status This product contains one or more substances that are listed with the State of California as

a hazardous waste.

14. Transport information

DOT Not regulated

15. Regulatory information

International Inventories

TSCA Contact supplier for inventory compliance status.

Chemical name	CAS No	US TSCA Inventory listing	US TSCA inactive/active designation
Corn syrup	8029-43-4	Present	Active
C.I. Pigment Brown 33	68186-88-9	Present	Active
Water	7732-18-5	Present	Active
Dextrin	9004-53-9	Present	Active
Feldspar	68476-25-5	Present	Active
Kaolin	1332-58-7	Present	Active
Quartz	14808-60-7	Present	Active
Frits, chemicals	65997-18-4	Present	Active
1,2,3-Propanetriol	56-81-5	Present	Active
Benzoic acid, 4-hydroxy-, methyl ester	99-76-3	Present	Active

DSL/NDSL Contact supplier for inventory compliance status. **EINECS/ELINCS** Contact supplier for inventory compliance status. Contact supplier for inventory compliance status. **ENCS IECSC** Contact supplier for inventory compliance status. **KECL** Contact supplier for inventory compliance status. **PICCS** Contact supplier for inventory compliance status. AIIC Contact supplier for inventory compliance status. **NZIoC** Contact supplier for inventory compliance status.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

Item Numbers: 30415-1009 Page 60 of 84

Revision date 01-Feb-2024

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AIIC - Australian Inventory of Industrial Chemicals

NZIoC - New Zealand Inventory of Chemicals

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %	
C.I. Pigment Brown 33 - 68186-88-9	1.0	
Frits, chemicals - 65997-18-4	0.1	
	1.0	

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
C.I. Pigment Brown 33 68186-88-9	-	X	-	-
Frits, chemicals 65997-18-4	-	X	-	-

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

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
C.I. Pigment Brown 33 68186-88-9	Х	-	Х
Water 7732-18-5	-	-	Х
Feldspar 68476-25-5	Х	-	Х
Kaolin 1332-58-7	Х	X	Х
Quartz 14808-60-7	X	X	Х
Frits, chemicals 65997-18-4	Х	-	X
1,2,3-Propanetriol 56-81-5	Х	X	Х

U.S. EPA Label Information

Item Numbers: 30415-1009 Page 61 of 84

Revision date 01-Feb-2024

EPA Pesticide Registration Number Not applicable

16. Other information

Health hazards 1 Instability 0 NFPA Flammability 0 Special hazards -* 2 1 HMIS Health hazards Flammability 0 Physical hazards 0 Personal protection X

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

Legend Section 8: Exposure controls/personal protection

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA) EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

National Institute of Technology and Evaluation (NITE)

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications

Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

World Health Organization

Revision date 01-Feb-2024

Revision Note Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

SAFETY DATA SHEET



Revision Number 1

Revision date 01-Feb-2024

1. Identification

Product identifier

Product Name Semi-Moist Underglaze - Chartreuse

Other means of identification

Product Code(s) FG00714

Synonyms 41423E, 01678F

Recommended use of the chemical and restrictions on use

Recommended use

Restrictions on use

Details of the supplier of the safety data sheet

Manufacturer Address

American Art Clay Co Inc 6060 Guion Road Indianapolis, IN 46254-1222 USA Toll Free: 1-800-999-5456 CustomerCare@Amaco.com

Emergency telephone number

Emergency Telephone U.S. Poison Control 1-800-222-1222

2. Hazard(s) identification

Classification

Acute toxicity - Oral	Category 4
Carcinogenicity	Category 1B
Specific target organ toxicity (repeated exposure)	Category 2

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Hazard	statements
Danger	

Page 1/11

Item Numbers: 30415-1009 Page 63 of 84

Revision date 01-Feb-2024

H302 - Harmful if swallowed

H350 - May cause cancer

H373 - May cause damage to organs through prolonged or repeated exposure



Physical state Solid

Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Wear protective gloves/clothing and eye/face protection

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Do not breathe dust/fume/gas/mist/vapors/spray

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell

Rinse mouth

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Unknown acute toxicity

187.2 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

Other information

Harmful to aquatic life with long lasting effects. Toxic to aquatic life.

3. Composition/information on ingredients

Not applicable.

Mixture

Chemical name	CAS No	Weight-%
C.I. Pigment Yellow 159	68187-15-5	10 - 20
C.I. Pigment Blue 71	68186-95-8	5 - <10
Quartz	14808-60-7	5 - <10
Kaolin	1332-58-7	5 - <10
Frits, chemicals	65997-18-4	5 - <10
1,2,3-Propanetriol	56-81-5	1 - <3
Spinels, chromium cobalt iron black	68186-97-0	0.1 - 1

4. First-aid measures

Description of first aid measures

General advice

Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get

Page 2/11

Item Numbers: 30415-1009 Page 64 of 84

Revision date 01-Feb-2024

medical advice/attention.

Inhalation Remove to fresh air.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

Skin contact Wash skin with soap and water.

Ingestion Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious

person. Call a physician.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. Fire-fighting measures

surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the

chemical

No information available.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Special protective equipment and

precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Use personal protective equipment as required. Evacuate

personnel to safe areas.

Other information Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for containmentPrevent further leakage or spillage if safe to do so.Methods for cleaning upPick up and transfer to properly labeled containers.

7. Handling and storage

Precautions for safe handling

Page 3 / 11

Item Numbers: 30415-1009 Page 65 of 84

Revision date 01-Feb-2024

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Advice on safe handling

Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach **Storage Conditions**

8. Exposure controls/personal protection

Control parameters

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
C.I. Pigment Yellow 159	STEL: 10 mg/m³ Zr	TWA: 5 mg/m³ Zr	IDLH: 25 mg/m³ Zr
68187-15-5	TWA: 5 mg/m³ Zr	(vacated) TWA: 5 mg/m³ Zr	TWA: 5 mg/m³ except Zirconium
		(vacated) STEL: 10 mg/m³ Zr	tetrachloride Zr
			STEL: 10 mg/m³ Zr
C.I. Pigment Blue 71	STEL: 10 mg/m³ Zr	TWA: 5 mg/m³ Zr	IDLH: 25 mg/m³ Zr
68186-95-8	TWA: 5 mg/m³ Zr	(vacated) TWA: 5 mg/m³ Zr	Ceiling: 0.05 mg/m³ V dust and
		(vacated) STEL: 10 mg/m³ Zr	fume 15 min TWA: 5 mg/m³ except Zirconium
			tetrachloride Zr
			STEL: 10 mg/m ³ Zr
Quartz	TWA: 0.025 mg/m ³ respirable	TWA: 50 μg/m ³	IDLH: 50 mg/m ³ respirable dust
14808-60-7	particulate matter	(vacated) TWA: 0.1 mg/m ³	TWA: 0.05 mg/m ³ respirable
		respirable dust	dust
		: (250)/(%SiO2 + 5) mppcf	
		TWA respirable fraction	
		: (10)/(%SiO2 + 2) mg/m ³ TWA respirable fraction	
Kaolin	TWA: 2 mg/m³ particulate	TWA: 15 mg/m³ total dust	TWA: 10 mg/m³ total dust
1332-58-7	matter containing no asbestos	TWA: 5 mg/m³ respirable	TWA: 10 mg/m total dust
1002 00 7	and <1% crystalline silica,	fraction	Two tings in Toophasio daet
	respirable particulate matter	(vacated) TWA: 10 mg/m³ total	
		dust	
		(vacated) TWA: 5 mg/m ³	
F	0.751 40 4 0.7	respirable fraction	15111.5 / 0.4
Frits, chemicals 65997-18-4	STEL: 10 mg/m³ Zr TWA: 0.01 mg/m³ As	TWA: 10 μg/m³ As TWA: 50 μg/m³ Pb	IDLH: 5 mg/m³ As IDLH: 9 mg/m³ Cd dust and
65997-16-4	TWA: 0.01 mg/m³ As TWA: 0.05 mg/m³ Pb	TWA: 50 μg/m³ Pb TWA: 0.5 mg/m³ Sb	fume
	TWA: 0.03 mg/m³ Cd	TWA: 5.5 mg/m³ Zr	IDLH: 50 mg/m ³ Sb
	TWA: 0.002 mg/m ³ Cd	(vacated) TWA: 0.5 mg/m ³ Sb	IDLH: 100 mg/m³ Cu dust and
	respirable particulate matter	(vacated) TWA: 5 mg/m³ Zr	mist
	TWA: 0.5 mg/m ³ Sb	(vacated) STEL: 10 mg/m³ Zr	IDLH: 500 mg/m ³ Mn
	TWA: 1 mg/m ³ Cu dust and mist	(vacated) Ceiling: 5 mg/m ³	IDLH: 25 mg/m ³ Zr
	TWA: 3 mg/m ³ W respirable	Ceiling: 5 mg/m³ Mn	IDLH: 100 mg/m ³ Pb
	particulate matter in the absence		IDLH: 10 mg/m³ Ni
	of cobalt TWA: 5 mg/m³ Zr		Ceiling: 0.002 mg/m ³ As 15 min Ceiling: 0.05 mg/m ³ V dust and
	TWA: 0.02 mg/m³ Mn respirable		fume 15 min
	particulate matter		TWA: 0.5 mg/m ³ Sb
	TWA: 0.1 mg/m ³ Mn inhalable		TWA: 1 mg/m³ Cu dust and
	particulate matter		mist
			TWA: 1 mg/m³ Mn
			TWA: 5 mg/m³ except Zirconium
			tetrachloride Zr
			TWA: 0.050 mg/m ³ Pb
			TWA: 0.015 mg/m ³ except

Page 66 of 84 Item Numbers: 30415-1009

Revision date 01-Feb-2024

			Nickel carbonyl Ni STEL: 3 mg/m³ Mn STEL: 10 mg/m³ Zr
1,2,3-Propanetriol 56-81-5	-	TWA: 15 mg/m³ mist, total particulate	-
30 01 0		TWA: 5 mg/m³ mist, respirable fraction	
		(vacated) TWA: 10 mg/m³ mist,	
		total particulate (vacated) TWA: 5 mg/m³ mist,	
		respirable fraction	
Spinels, chromium cobalt iron	TWA: 0.02 mg/m ³ Co inhalable	TWA: 0.5 mg/m ³ Cr	IDLH: 25 mg/m ³ Cr(III)
black 68186-97-0	particulate matter	(vacated) TWA: 0.5 mg/m³ Cr	TWA: 0.5 mg/m ³ Cr

Biological occupational exposure limits

Chemical name	ACGIH
Frits, chemicals	200 μg/L - blood (Lead) - not critical
65997-18-4	5 μg/g creatinine - urine (Cadmium) - not critical
	5 μg/Ĺ - blood (Cadmium) - not critical
Spinels, chromium cobalt iron black	15 μg/L - urine (Cobalt) - end of shift at end of workweek
68186-97-0	

Appropriate engineering controls

Engineering controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection No special protective equipment required.

Hand protection Wear suitable gloves.

Skin and body protection Wear suitable protective clothing.

exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Do not eat, drink or smoke when using this product. Wash hands before breaks and

immediately after handling the product.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Solid

Appearance Color

Odor

Odor threshold

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

PH No data available None known
Melting point / freezing point No data available None known
Initial boiling point and boiling rangeNo data available None known
Flash point No data available None known
Evaporation rate No data available None known

Revision date 01-Feb-2024

Flammability No data available None known Flammability Limit in Air None known

Upper flammability or explosive No data available

Lower flammability or explosive No data available

limits

Vapor pressure No data available None known No data available None known Relative vapor density Relative density No data available None known Water solubility No data available None known Solubility(ies) No data available None known Partition coefficient No data available None known **Autoignition temperature** No data available None known Decomposition temperature None known No data available

Kinematic viscosity None known Dynamic viscosity No data available None known

Other information

Explosive properties No information available Oxidizing properties No information available No information available **VOC Content (%)**

10. Stability and reactivity

Reactivity No information available.

Chemical stability Stable under normal conditions. Possibility of hazardous reactions None under normal processing.

Conditions to avoid None known based on information supplied. Incompatible materials None known based on information supplied. Hazardous decomposition products None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

Specific test data for the substance or mixture is not available. Inhalation Eye contact Specific test data for the substance or mixture is not available.

Skin contact Specific test data for the substance or mixture is not available.

Specific test data for the substance or mixture is not available. Harmful if swallowed. (based Ingestion

on components).

Symptoms related to the physical, chemical and toxicological characteristics

No information available. **Symptoms**

Acute toxicity

Numerical measures of toxicity

No information available

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 1,211.60 mg/kg

Page 68 of 84 Item Numbers: 30415-1009

Revision date 01-Feb-2024

ATEmix (dermal) 17,223.60 mg/kg ATEmix (inhalation-dust/mist) 16.90 mg/l

Unknown acute toxicity

187.2 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
C.I. Pigment Yellow 159 68187-15-5	-	-	> 5.5 mg/L (Rat)4 h
C.I. Pigment Blue 71 68186-95-8	-	-	> 5.1 mg/L (Rat) 4 h
Kaolin 1332-58-7	> 5000 mg/kg (Rat)	> 5000 mg/kg (Rat)	-
Frits, chemicals 65997-18-4	> 2000 mg/kg (Rat)	> 2000 mg/kg (Rat)	-
1,2,3-Propanetriol 56-81-5	= 12600 mg/kg (Rat)	> 10 g/kg (Rabbit)	> 2.75 mg/L (Rat) 4 h
Spinels, chromium cobalt iron black 68186-97-0	-	-	> 5.09 mg/L (Rat)4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritationNo information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity Contains a known or suspected carcinogen. Classification based on data available for

ingredients. May cause cancer.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

The table below indicates whether each agency has listed any ingredient as a carcinogen.				
Chemical name	ACGIH	IARC	NTP	OSHA
Quartz 14808-60-7	A2	Group 1	Known	Х
Frits, chemicals 65997-18-4	A1 A3 A2	Group 1 Group 2B Group 2A	Known Reasonably Anticipated	×
Spinels, chromium cobalt iron black 68186-97-0	А3	Group 2B Group 3	Reasonably Anticipated	×

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A1 - Known Human Carcinogen

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

Group 3 - Not Classifiable as to Carcinogenicity in Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Revision date 01-Feb-2024

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure.

Liver, Kidney, Respiratory system, Eyes, Skin, Central nervous system, Blood, Central Vascular System (CVS), Lungs, Nasal Cavities, Lymphatic System, prostate, Target organ effects

Gastrointestinal tract (GI).

Aspiration hazard No information available.

Other adverse effects

Interactive effects

12. Ecological information

Ecotoxicity

Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
1,2,3-Propanetriol 56-81-5	-	LC50: 51 - 57mL/L (96h, Oncorhynchus mykiss)	-	-

Persistence and degradability

Bioaccumulation

Component Information

Component information		
Chemical name	Partition coefficient	
1,2,3-Propanetriol	-1.76	
56-81-5		

No information available. Other adverse effects

13. Disposal considerations

Disposal methods

Waste from residues/unused products

Dispose of waste in accordance with environmental legislation. Dispose of in accordance with local regulations.

Contaminated packaging

Do not reuse empty containers.

California Hazardous Waste Status This product contains one or more substances that are listed with the State of California as

a hazardous waste.

14. Transport information

Page 70 of 84 Item Numbers: 30415-1009

Revision date 01-Feb-2024

DOT Not regulated

15. Regulatory information

International Inventories

TSCA

Contact supplier for inventory compliance status.

Chemical name	CAS No	US TSCA Inventory listing	US TSCA inactive/active designation
Corn syrup	8029-43-4	Present	Active
C.I. Pigment Yellow 159	68187-15-5	Present	Active
Water	7732-18-5	Present	Active
Dextrin	9004-53-9	Present	Active
C.I. Pigment Blue 71	68186-95-8	Present	Active
Kaolin	1332-58-7	Present	Active
Quartz	14808-60-7	Present	Active
Frits, chemicals	65997-18-4	Present	Active
Feldspar	68476-25-5	Present	Active
1,2,3-Propanetriol	56-81-5	Present	Active
Spinels, chromium cobalt iron black	68186-97-0	Present	Active
Benzoic acid, 4-hydroxy-, methyl ester	99-76-3	Present	Active

DSL/NDSL
Contact supplier for inventory compliance status.
KECL
Contact supplier for inventory compliance status.
NZIOC
Contact supplier for inventory compliance status.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AIIC - Australian Inventory of Industrial Chemicals

NZIoC - New Zealand Inventory of Chemicals

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %

9/11

Item Numbers: 30415-1009 Page 71 of 84

Page

Revision date 01-Feb-2024

C.I. Pigment Blue 71 - 68186-95-8	1.0
Frits, chemicals - 65997-18-4	0.1
	1.0
Spinels, chromium cobalt iron black - 68186-97-0	0.1
·	1.0

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Frits, chemicals 65997-18-4	-	X	-	-
Spinels, chromium cobalt iron black 68186-97-0	-	X	-	-

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

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Water 7732-18-5	-	-	X
C.I. Pigment Blue 71 68186-95-8	X	-	-
Kaolin 1332-58-7	X	Х	X
Quartz 14808-60-7	X	Х	Х
Frits, chemicals 65997-18-4	Х	-	Х
Feldspar 68476-25-5	Х	-	Х
1,2,3-Propanetriol 56-81-5	X	Х	X
Spinels, chromium cobalt iron black 68186-97-0	X	-	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information								
NFPA	Health hazards		Flammability 0	Instability 0	Special hazards -			
HMIS	Health hazards		Flammability 0	Physical hazards 0	Personal protection X			

 Page
 10 / 11

 Item Numbers: 30415-1009
 Page 72 of 84

FG00714 - Semi-Moist Underglaze - Chartreuse

Revision date 01-Feb-2024

Chronic Hazard Star Legend

* = Chronic Health Hazard

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

Legend Section 8: Exposure controls/personal protection

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)
Ceiling Maximum limit value * Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

National Institute of Technology and Evaluation (NITE)

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications

Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

World Health Organization

Revision date

01-Feb-2024

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End of Safety Data Sheet

SAFETY DATA SHEET



Revision Number 1

Revision date 01-Feb-2024

1. Identification

Product identifier

Product Name Semi-Moist Underglazes - Suntan

Other means of identification

Product Code(s) FG00733

Synonyms 41424H, 01696P

Recommended use of the chemical and restrictions on use

Recommended use Restrictions on use

Details of the supplier of the safety data sheet

Manufacturer Address

American Art Clay Co Inc 6060 Guion Road Indianapolis, IN 46254-1222 USA Toll Free: 1-800-999-5456 CustomerCare@Amaco.com

Emergency telephone number

Emergency Telephone U.S. Poison Control 1-800-222-1222

2. Hazard(s) identification

Classification

Acute toxicity - Oral	Category 4
Specific target organ toxicity (repeated exposure)	Category 2

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Hazard statements Warning

Page 1/11

Item Numbers: 30415-1009 Page 74 of 84

Revision date 01-Feb-2024

H302 - Harmful if swallowed

H373 - May cause damage to organs through prolonged or repeated exposure



Physical state Solid

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Do not breathe dust/fume/gas/mist/vapors/spray

Precautionary Statements - Response

Get medical advice/attention if you feel unwell IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell Rinse mouth

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Unknown acute toxicity

197.73 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

Other information

Harmful to aquatic life with long lasting effects. Toxic to aquatic life.

3. Composition/information on ingredients

Not applicable.

Mixture

Chemical name	CAS No	Weight-%
Silicic acid (H4SiO4), zirconium(4+) salt (1:1)	10101-52-7	20 - 40
C.I. Pigment Brown 33	68186-88-9	5 - <10
Frits, chemicals	65997-18-4	5 - <10
Quartz	14808-60-7	3 - <5
Kaolin	1332-58-7	3 - <5
1,2,3-Propanetriol	56-81-5	1 - <3

4. First-aid measures

Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance.

Inhalation Remove to fresh air.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

Skin contact Wash skin with soap and water.

Item Numbers: 30415-1009 Page 75 of 84

Revision date 01-Feb-2024

Ingestion Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious

person. Call a physician.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

5. Fire-fighting measures

surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the

chemical

No information available.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Use personal protective equipment as required. Evacuate

personnel to safe areas.

Other information Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for containmentPrevent further leakage or spillage if safe to do so.Methods for cleaning upPick up and transfer to properly labeled containers.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Ensure adequate

ventilation.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach

of children.

Page 3 / 11

Item Numbers: 30415-1009 Page 76 of 84

Revision date 01-Feb-2024

8. Exposure controls/personal protection

Control parameters

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Silicic acid (H4SiO4),	STEL: 10 mg/m ³ Zr	TWA: 5 mg/m³ Zr	IDLH: 25 mg/m³ Zr
zirconium(4+) salt (1:1)	TWA: 5 mg/m³ Zr	(vacated) TWA: 5 mg/m³ Zr	TWA: 5 mg/m³ except Zirconium
10101-52-7		(vacated) STEL: 10 mg/m³ Zr	tetrachloride Zr
			STEL: 10 mg/m³ Zr
C.I. Pigment Brown 33	-	TWA: 0.5 mg/m³ Cr	IDLH: 25 mg/m³ Cr(III)
68186-88-9	0.751 40 4 2.7	(vacated) TWA: 0.5 mg/m³ Cr	TWA: 0.5 mg/m³ Cr
Frits, chemicals	STEL: 10 mg/m³ Zr	TWA: 10 μg/m³ As	IDLH: 5 mg/m³ As IDLH: 9 mg/m³ Cd dust and
65997-18-4	TWA: 0.01 mg/m³ As TWA: 0.05 mg/m³ Pb	TWA: 50 μg/m³ Pb TWA: 0.5 mg/m³ Sb	fume
	TWA: 0.03 mg/m³ Fb	TWA: 0.5 mg/m ³ Zr	IDLH: 50 mg/m ³ Sb
	TWA: 0.002 mg/m ³ Cd	(vacated) TWA: 0.5 mg/m³ Sb	IDLH: 100 mg/m³ Cu dust and
	respirable particulate matter	(vacated) TWA: 5 mg/m³ Zr	mist
	TWA: 0.5 mg/m ³ Sb	(vacated) STEL: 10 mg/m ³ Zr	IDLH: 500 mg/m³ Mn
	TWA: 1 mg/m3 Cu dust and mist	(vacated) Ceiling: 5 mg/m ³	IDLH: 25 mg/m³ Zr
	TWA: 3 mg/m³ W respirable	Ceiling: 5 mg/m ³ Mn	IDLH: 100 mg/m ³ Pb
	particulate matter in the absence		IDLH: 10 mg/m ³ Ni
	of cobalt		Ceiling: 0.002 mg/m³ As 15 min
	TWA: 5 mg/m³ Zr		Ceiling: 0.05 mg/m³ V dust and
	TWA: 0.02 mg/m³ Mn respirable		fume 15 min
	particulate matter TWA: 0.1 mg/m³ Mn inhalable		TWA: 0.5 mg/m³ Sb TWA: 1 mg/m³ Cu dust and
	particulate matter		mist
	particulate matter		TWA: 1 mg/m³ Mn
			TWA: 5 mg/m ³ except Zirconium
			tetrachloride Zr
			TWA: 0.050 mg/m ³ Pb
			TWA: 0.015 mg/m³ except
			Nickel carbonyl Ni
			STEL: 3 mg/m³ Mn
			STEL: 10 mg/m³ Zr
Quartz	TWA: 0.025 mg/m³ respirable	TWA: 50 μg/m ³	IDLH: 50 mg/m³ respirable dust
14808-60-7	particulate matter	(vacated) TWA: 0.1 mg/m ³	TWA: 0.05 mg/m³ respirable
		respirable dust	dust
		: (250)/(%SiO2 + 5) mppcf TWA respirable fraction	
		: (10)/(%SiO2 + 2) mg/m ³	
		TWA respirable fraction	
Kaolin	TWA: 2 mg/m³ particulate	TWA: 15 mg/m³ total dust	TWA: 10 mg/m³ total dust
1332-58-7	matter containing no asbestos	TWA: 5 mg/m³ respirable	TWA: 5 mg/m ³ respirable dust
	and <1% crystalline silica,	fraction	
	respirable particulate matter	(vacated) TWA: 10 mg/m³ total	
		dust	
		(vacated) TWA: 5 mg/m ³	
		respirable fraction	
1,2,3-Propanetriol	-	TWA: 15 mg/m³ mist, total	-
56-81-5		particulate	
		TWA: 5 mg/m³ mist, respirable fraction	
		traction (vacated) TWA: 10 mg/m³ mist,	
		total particulate	
		(vacated) TWA: 5 mg/m³ mist,	
		respirable fraction	
L	I		

Biological occupational exposure limits

Item Numbers: 30415-1009 Page 77 of 84

Revision date 01-Feb-2024

Chemical name	ACGIH
Frits, chemicals	200 μg/L - blood (Lead) - not critical
65997-18-4	5 μg/g creatinine - urine (Cadmium) - not critical
	5 μg/L - blood (Cadmium) - not critical

Appropriate engineering controls

Engineering controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection No special protective equipment required.

Skin and body protection No special protective equipment required.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Solid

Appearance Color

Odor

Odor threshold

Property	Values	Remarks • Method
pH	No data available	None known
Melting point / freezing point	No data available	None known
Initial boiling point and boiling rang		None known
Flash point	No data available	None known
Evaporation rate	No data available	None known
Flammability	No data available	None known
Flammability Limit in Air	NO data available	None known
Upper flammability or explosive	No data available	None known
limits	No data avallable	
	No data available	
Lower flammability or explosive limits	NO data avallable	
	No data available	None known
Vapor pressure	No data available	None known
Relative vapor density	No data available No data available	None known
Relative density		
Water solubility	No data available	None known
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature		None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Other information_		
Explosive properties	No information available	
Oxidizing properties	No information available	
VOC Content (%)	No information available	

Page 5/11

Item Numbers: 30415-1009 Page 78 of 84

Revision date 01-Feb-2024

10. Stability and reactivity

Reactivity No information available.

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions None under normal processing.

Conditions to avoid

None known based on information supplied.

Incompatible materials

None known based on information supplied.

Hazardous decomposition products

None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available.

Eye contact Specific test data for the substance or mixture is not available.

Skin contact Specific test data for the substance or mixture is not available.

Ingestion Specific test data for the substance or mixture is not available. Harmful if swallowed. (based

on components).

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Acute toxicity

Numerical measures of toxicity

No information available

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 1,472.60 mg/kg
ATEmix (dermal) 22,805.00 mg/kg
ATEmix (inhalation-dust/mist) 19.80 mg/l

Unknown acute toxicity

197.73 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
C.I. Pigment Brown 33 68186-88-9	-	-	> 5.06 mg/L (Rat) 4 h
Frits, chemicals 65997-18-4	> 2000 mg/kg (Rat)	> 2000 mg/kg (Rat)	-
Kaolin 1332-58-7	> 5000 mg/kg (Rat)	> 5000 mg/kg (Rat)	-
1,2,3-Propanetriol 56-81-5	= 12600 mg/kg (Rat)	> 10 g/kg(Rabbit)	> 2.75 mg/L (Rat)4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritationNo information available.

Page 6/11

Item Numbers: 30415-1009 Page 79 of 84

Revision date 01-Feb-2024

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
C.I. Pigment Brown 33	-	Group 3	-	-
68186-88-9				
Frits, chemicals	A1	Group 1	Known	X
65997-18-4	A3	Group 2B	Reasonably Anticipated	
	A2	Group 2A	·	
Quartz	A2	Group 1	Known	X
14808-60-7		·		

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A1 - Known Human Carcinogen

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

Group 3 - Not Classifiable as to Carcinogenicity in Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure.

Target organ effects Liver, Kidney, Respiratory system, Eyes, Skin, Central nervous system, Blood, Central

Vascular System (CVS), Lungs, Nasal Cavities, Lymphatic System, prostate,

Gastrointestinal tract (GI).

Aspiration hazard No information available.

Other adverse effects

Interactive effects

12. Ecological information

Ecotoxicity Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Page 7/11

Item Numbers: 30415-1009 Page 80 of 84

Revision date 01-Feb-2024

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
1,2,3-Propanetriol 56-81-5	-	LC50: 51 - 57mL/L (96h, Oncorhynchus mykiss)	-	-

Persistence and degradability

Bioaccumulation

Component Information

Chemical name	Partition coefficient
1,2,3-Propanetriol	-1.76
56-81-5	

Other adverse effects No information available.

13. Disposal considerations

Disposal methods

Waste from residues/unused products

Dispose of waste in accordance with environmental legislation. Dispose of in accordance

with local regulations.

Contaminated packaging

Do not reuse empty containers.

California Hazardous Waste Status This product contains one or more substances that are listed with the State of California as

a hazardous waste.

14. Transport information

DOT Not regulated

15. Regulatory information

International Inventories

TSCA Contact supplier for inventory compliance status.

Chemical name	CAS No	US TSCA Inventory listing	US TSCA inactive/active designation
Corn syrup	8029-43-4	Present	Active
Silicic acid (H4SiO4), zirconium(4+)	10101-52-7	Present	Active
salt (1:1)			
Water	7732-18-5	Present	Active
Dextrin	9004-53-9	Present	Active
C.I. Pigment Brown 33	68186-88-9	Present	Active

Page 81 of 84 Item Numbers: 30415-1009

Revision date 01-Feb-2024

Chemical name	CAS No	US TSCA Inventory listing	US TSCA inactive/active
			designation
Frits, chemicals	65997-18-4	Present	Active
Feldspar	68476-25-5	Present	Active
Kaolin	1332-58-7	Present	Active
Quartz	14808-60-7	Present	Active
1,2,3-Propanetriol	56-81-5	Present	Active
C.I. Pigment Brown 35	68187-09-7	Present	Active
C.I. Pigment Yellow 159	68187-15-5	Present	Active
Benzoic acid, 4-hydroxy-, methyl ester	99-76-3	Present	Active

DSL/NDSL Contact supplier for inventory compliance status. **EINECS/ELINCS** Contact supplier for inventory compliance status. **ENCS** Contact supplier for inventory compliance status. **IECSC** Contact supplier for inventory compliance status. **KECL** Contact supplier for inventory compliance status. Contact supplier for inventory compliance status. **PICCS** Contact supplier for inventory compliance status. AIIC **NZIoC** Contact supplier for inventory compliance status.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AIIC - Australian Inventory of Industrial Chemicals

NZIoC - New Zealand Inventory of Chemicals

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %
C.I. Pigment Brown 33 - 68186-88-9	1.0
Frits, chemicals - 65997-18-4	0.1
	1.0

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
C.I. Pigment Brown 33 68186-88-9	-	X	-	-
Frits, chemicals 65997-18-4	-	X	-	-

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

Item Numbers: 30415-1009 Page 82 of 84

Revision date 01-Feb-2024

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

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Water 7732-18-5	-	-	X
C.I. Pigment Brown 33 68186-88-9	Х	-	Х
Frits, chemicals 65997-18-4	Х	-	Х
Feldspar 68476-25-5	X	-	Х
Kaolin 1332-58-7	X	X	Х
Quartz 14808-60-7	X	X	Х
1,2,3-Propanetriol 56-81-5	Х	X	Х
C.I. Pigment Brown 35 68187-09-7	Х	-	Х

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA Health hazards 1 Flammability 0 Instability 0 Special hazards Health hazards * 2 Flammability 0 Physical hazards 0 HMIS Personal protection X

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

Legend Section 8: Exposure controls/personal protection

TWA (time-weighted average) STEL (Short Term Exposure Limit)

Ceiling Maximum limit value Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA) EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

National Institute of Technology and Evaluation (NITE)

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications

Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Page 83 of 84 Item Numbers: 30415-1009

Revision date 01-Feb-2024

Organization for Economic Co-operation and Development Screening Information Data Set World Health Organization

Revision date Revision Note 01-Feb-2024

Disclaimer The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

Page 84 of 84 Item Numbers: 30415-1009

Page 11/11