SAFETY DATA SHEET



Revision date 24-Oct-2023

Revision Number 1

1. Identification

Product identifier

Product Name CO-13 Mars Crystal

Other means of identification

Product Code(s) FG00849

UN number or ID number UN3082

Synonyms 35553D

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 |
|--|------------|
| Skin sensitization | Category 1 |
| Specific target organ toxicity (repeated exposure) | Category 2 |

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Hazard statements

Warning

H302 - Harmful if swallowed

H317 - May cause an allergic skin reaction

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



Physical state Liquid

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Contaminated work clothing must not be allowed out of the workplace

Wear protective gloves

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

Precautionary Statements - Response

Specific treatment (see .? on this label)
Get medical advice/attention if you feel unwell
IF ON SKIN: Wash with plenty of water and soap

If skin irritation or rash occurs: Get medical advice/attention

Wash contaminated clothing before reuse

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

2.287 % 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-% |
|---|------------|----------|
| Water | 7732-18-5 | 40 - 60 |
| Frits, chemicals | 65997-18-4 | 20 - 40 |
| Bismuth Trioxide | 1304-76-3 | 10 - 20 |
| Kaolin | 1332-58-7 | 5 - <10 |
| Iron oxide (Fe2O3) | 1309-37-1 | 5 - <10 |
| Calcium molybdate | 7789-82-4 | 1 - <3 |
| Sodium carboxymethyl cellulose | 9004-32-4 | 0.1 - 1 |
| Smectite-group minerals | 12199-37-0 | 0.1 - 1 |
| Limestone | 1317-65-3 | 0.1 - 1 |
| 1,3,5-Triazine-1,3,5(2H,4H,6H)-triethanol | 4719-04-4 | 0.1 - 1 |
| Ethanolamine | 141-43-5 | <0.1 |

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 with soap and water. May cause an allergic skin reaction. In the case of skin irritation

or allergic reactions see a physician.

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 Itching. Rashes. Hives.

Indication of any immediate medical attention and special treatment needed

Note to physicians May cause sensitization in susceptible persons. Treat symptomatically.

5. Fire-fighting measures

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

surrounding environment.

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

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

Specific hazards arising from the

chemical

Product is or contains a sensitizer. May cause sensitization by skin contact.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge

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

Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal Personal precautions

protective equipment as required. Evacuate personnel to safe areas. Keep people away

from and upwind of spill/leak.

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

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

Advice on safe handling

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

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

The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here.

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH |
|------------------|---|---|--|
| Frits, chemicals | STEL: 10 mg/m ³ Zr | TWA: 10 µg/m³ As | IDLH: 5 mg/m³ 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/m³ 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/m ³ Sb | IDLH: 100 mg/m³ Cu dust and |
| | respirable particulate matter | (vacated) TWA: 5 mg/m ³ Zr | mist |
| | TWA: 0.5 mg/m ³ Sb | (vacated) STEL: 10 mg/m ³ 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/m³ Zr |
| | TWA: 3 mg/m ³ W respirable | Ceiling: 5 mg/m ³ Mn | IDLH: 100 mg/m ³ 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/m³ 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/m³ Pb |
| | | | TWA: 0.015 mg/m³ except |
| | | | Nickel carbonyl Ni STEL: 3 mg/m³ Mn |
| | | | STEL: 3 mg/m³ Zr |
| 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/m³ total dust TWA: 5 mg/m³ respirable dust |
| 1002 00 7 | and <1% crystalline silica, | fraction | Tropirable dust |
| | respirable particulate matter | (vacated) TWA: 10 mg/m³ total | |
| | Toophable particulate matter | dust | |
| | | (vacated) TWA: 5 mg/m ³ | |

| | | respirable fraction | |
|--------------------|--|---|---------------------------------|
| Iron oxide (Fe2O3) | TWA: 5 mg/m³ respirable | TWA: 10 mg/m³ fume | IDLH: 2500 mg/m3 Fe dust and |
| 1309-37-1 | particulate matter | TWA: 15 mg/m³ total dust | fume |
| | | TWA: 5 mg/m ³ respirable | TWA: 5 mg/m³ Fe dust and |
| | | fraction | fume |
| | | (vacated) TWA: 10 mg/m³ fume | |
| | | and total dust Iron oxide | |
| | | (vacated) TWA: 5 mg/m ³ | |
| | | respirable fraction regulated | |
| | | under Rouge | |
| Calcium molybdate | TWA: 10 mg/m ³ Mo inhalable | TWA: 15 mg/m³ total dust | IDLH: 5000 mg/m ³ Mo |
| 7789-82-4 | particulate matter | (vacated) TWA: 10 mg/m³ Mo | |
| | TWA: 3 mg/m ³ Mo respirable | | |
| | particulate matter | | |
| Limestone | - | TWA: 15 mg/m³ total dust | TWA: 10 mg/m³ total dust |
| 1317-65-3 | | TWA: 5 mg/m³ respirable | TWA: 5 mg/m³ respirable dust |
| | | fraction | |
| | | (vacated) TWA: 15 mg/m³ total | |
| | | dust | |
| | | (vacated) TWA: 5 mg/m ³ | |
| Ethanalania | 0.751 - 0.757 | respirable fraction | IDI II. 00 mm |
| Ethanolamine | STEL: 6 ppm | TWA: 3 ppm | IDLH: 30 ppm |
| 141-43-5 | TWA: 3 ppm | TWA: 6 mg/m ³ | TWA: 3 ppm |
| | | (vacated) TWA: 3 ppm | TWA: 8 mg/m ³ |
| | | (vacated) TWA: 8 mg/m ³ (vacated) STEL: 6 ppm | STEL: 6 ppm |
| | | | STEL: 15 mg/m ³ |
| | | (vacated) STEL: 15 mg/m ³ | |

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 Wear safety glasses with side shields (or goggles).

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 Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Liquid

Appearance

Color Odor

Odor threshold

Values_ **Property** Remarks • Method

На 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 **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

No data available None known Vapor pressure Relative vapor density No data available None known Relative density No data available None known No data available Water solubility 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 **VOC Content (%)** 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

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

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

Skin contact May cause sensitization by skin contact. Specific test data for the substance or mixture is

not available. Repeated or prolonged skin contact may cause allergic reactions with

susceptible persons. (based on components).

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 Itching. Rashes. Hives.

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)
 459.10 mg/kg

 ATEmix (dermal)
 6,290.10 mg/kg

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

Unknown acute toxicity

2.287 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|--|-----------------------|-------------------------|--|
| Water 7732-18-5 | () | | - |
| Frits, chemicals 65997-18-4 | > 2000 mg/kg (Rat) | > 2000 mg/kg (Rat) | - |
| Bismuth Trioxide 1304-76-3 | = 5 g/kg (Rat) | - | > 5.07 mg/L (Rat) 4 h |
| Kaolin 1332-58-7 | > 5000 mg/kg(Rat) | > 5000 mg/kg (Rat) | - |
| Iron oxide (Fe2O3) 1309-37-1 | > 10000 mg/kg (Rat) | - | - |
| Calcium molybdate 7789-82-4 | - | > 2000 mg/kg (Rat) | > 5.84 mg/L (Rat) 4 h |
| Sodium carboxymethyl cellulose 9004-32-4 | = 27000 mg/kg (Rat) | - | > 5800 mg/m³ (Rat) 4 h |
| 1,3,5-Triazine-1,3,5(2H,4H,6H)-t riethanol 4719-04-4 | = 763 mg/kg(Rat) | > 4000 mg/kg (Rat) | = 0.4 mg/L (Rat) 4 h = 0.338 mg/L (Rat) 4 h |
| Ethanolamine 141-43-5 | = 1720 mg/kg(Rat) | = 1000 mg/kg (Rabbit) | > 1.3 mg/L (Rat) 6 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 May cause an allergic skin reaction.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

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 |
| | Frits, chemicals | A1 | Group 1 | Known | X |
| | 65997-18-4 | A3 | Group 2B | Reasonably Anticipated | |
| | | A2 | Group 2A | · | |
| | Iron oxide (Fe2O3) | - | Group 3 | - | - |
| | 1309-37-1 | | | | |

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 | |
| Iron oxide (Fe2O3) | - | LC50: =100000mg/L (96h, | - | - |
| 1309-37-1 | | Danio rerio) | | |
| 1,3,5-Triazine-1,3,5(2H,4 | - | LC50: =16.07mg/L (96h, | - | - |
| H,6H)-triethanol | | Danio rerio) | | |
| 4719-04-4 | | | | |
| Ethanolamine | EC50: =15mg/L (72h, | LC50: =227mg/L (96h, | - | EC50: =65mg/L (48h, |
| 141-43-5 | Desmodesmus | Pimephales promelas) | | Daphnia magna) |
| | subspicatus) | LC50: =3684mg/L (96h, | | _ |
| | | Brachydanio rerio) | | |
| | | LC50: 300 - 1000mg/L | | |
| | | (96h, Lepomis | | |
| | | macrochirus) | | |
| | | LC50: 114 - 196mg/L | | |
| | | (96h, Oncorhynchus | | |
| | | mykiss) | | |
| | | LC50: >200mg/L (96h, | | |
| | | Oncorhynchus mykiss) | | |

Persistence and degradability

Bioaccumulation There is no data for this product.

| Chemical name | Partition coefficient |
|---------------|-----------------------|
| Ethanolamine | -1.91 |
| 141-43-5 | |

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

UN3082 **UN number or ID number**

Proper shipping name Environmentally hazardous substance, liquid, n.o.s.

Transport hazard class(es) Packing group Ш

Special Provisions 8, 146, 173, 335, IB3, T4, TP1, TP29

DOT Marine Pollutant PΡ

Marine pollutant Frits, chemicals

Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (Frits, chemicals), 9, III,

Marine pollutant

Emergency Response Guide

Number

171

TDG

UN number or ID number UN3082

UN proper shipping name Environmentally hazardous substance, liquid, n.o.s.

Transport hazard class(es) Packing group Ш **Special Provisions** 16.99

Marine pollutant name Frits, chemicals.

Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (Frits, chemicals), 9, III

MEX

UN number or ID number UN3082

UN proper shipping name Environmentally hazardous substance, liquid, n.o.s.

Transport hazard class(es) Packing group Ш

Technical Name Frits, chemicals

Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (Frits, chemicals), 9, III

Special Provisions 274, 331, 335

ICAO (air)

UN number or ID number UN3082

UN proper shipping name Environmentally hazardous substance, liquid, n.o.s.

Transport hazard class(es)

Packing group

Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (Frits, chemicals), 9, III

Special Provisions A97, A158, A197, A215

IATA

UN number or ID number UN3082

UN proper shipping name Environmentally hazardous substance, liquid, n.o.s.

Transport hazard class(es) 9
Packing group III

Technical Name Frits, chemicals

Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (Frits, chemicals), 9, III

Special Provisions A97, A158, A197

ERG Code 9L

IMDG

UN number or ID number UN3082

UN proper shipping name Environmentally hazardous substance, liquid, n.o.s.

Transport hazard class(es)

Packing group

EmS-No

Special Provisions

9

III

F-A, S-F

274, 335, 969

Marine pollutant P

Marine Pollutant Frits, chemicals

Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (Frits, chemicals), 9, III,

Marine pollutant

RID

UN number or ID number UN3082

UN proper shipping name Environmentally hazardous substance, liquid, n.o.s.

Transport hazard class(es) 9
Packing group III
Classification code M6

Special Provisions 274, 335, 375, 601

Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (Frits, chemicals), 9, III

<u>ADR</u>

UN number or ID number UN3082

UN proper shipping name Environmentally hazardous substance, liquid, n.o.s.

Transport hazard class(es) 9
Packing group III
Classification code M6
Tunnel restriction code (-)

Special Provisions 274, 335, 601, 375

Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (Frits, chemicals), 9, III, (-)

ADN

UN number or ID number UN3082

UN proper shipping name Environmentally hazardous substance, liquid, n.o.s.

Transport hazard class(es) 9
Packing group III
Classification code M6

Special Provisions 274, 335, 375, 601

Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (Frits, chemicals), 9, III

Equipment Requirements PP

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 |
|--|------------|---------------------------|-------------------------------------|
| Water | 7732-18-5 | Present | Active |
| Frits, chemicals | 65997-18-4 | Present | Active |
| Bismuth Trioxide | 1304-76-3 | Present | Active |
| Kaolin | 1332-58-7 | Present | Active |
| Iron oxide (Fe2O3) | 1309-37-1 | Present | Active |
| Calcium molybdate | 7789-82-4 | Present | Active |
| Sodium carboxymethyl cellulose | 9004-32-4 | Present | Active |
| Smectite-group minerals | 12199-37-0 | Present | Active |
| Limestone | 1317-65-3 | Present | Active |
| 1,3,5-Triazine-1,3,5(2H,4H,6H)-trietha | 4719-04-4 | Present | Active |
| nol | | | |
| Ethanolamine | 141-43-5 | Present | Active |

Contact supplier for inventory compliance status. DSL/NDSL Contact supplier for inventory compliance status. **EINECS/ELINCS ENCS** Contact supplier for inventory compliance status. 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. 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 % |
|-------------------------------|-------------------------------|
| 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 |
|--------------------------------|--------------------------------|------------------------|---------------------------|-------------------------------|
| 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 |
| Frits, chemicals 65997-18-4 | X | - | X |
| Kaolin 1332-58-7 | X | X | X |
| Iron oxide (Fe2O3) 1309-37-1 | X | X | X |
| Limestone 1317-65-3 | X | Х | Х |
| Ethanolamine 141-43-5 | X | X | X |

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPAHealth hazards2Flammability0Instability0Special hazards-HMISHealth hazards2 *Flammability0Physical 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

FG00849 - CO-13 Mars Crystal

Revision date 24-Oct-2023

Revision date Revision Note Disclaimer 24-Oct-2023

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