

# SAFETY DATA SHEET



Revision date 29-May-2024

Revision Number 1.01

## 1. Identification

### Product identifier

Product Name INK-87 Bright Red

### Other means of identification

Product Code(s) FG00880

UN number or ID number UN3082

Synonyms 34005E

### 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
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin sensitization	Category 1
Carcinogenicity	Category 1A
Specific target organ toxicity (repeated exposure)	Category 2

### Hazards not otherwise classified (HNOC)

Not applicable

**Label elements****Hazard statements****Danger**

H302 - Harmful if swallowed

H317 - May cause an allergic skin reaction

H332 - Harmful if inhaled

H350 - May cause cancer

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

**Physical state** Liquid**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

Use only outdoors or in a well-ventilated area

Contaminated work clothing must not be allowed out of the workplace

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

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention

Specific treatment (see .? on this label)

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 INHALED: Remove person to fresh air and keep comfortable for breathing

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**

9.47235 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

17.5639 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

**Other information**

May be harmful in contact with skin. Toxic to aquatic life with long lasting effects. Very toxic to aquatic life.

**3. Composition/information on ingredients**

Not applicable.

**Mixture**

Chemical name	CAS No	Weight-%
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Zircon, cadmium red	72828-62-7	10 - 20
Frits, chemicals	65997-18-4	10 - 20
Kaolin	1332-58-7	5 - <10
C.I. Pigment Yellow 159	68187-15-5	3 - <5
Zircon	14940-68-2	1 - <3
Aluminum oxide (Al <sub>2</sub> O <sub>3</sub> )	1344-28-1	1 - <3
1,2,3-Propanetriol	56-81-5	1 - <3
Zinc oxide (ZnO)	1314-13-2	0.1 - 1
1,3,5-Triazine-1,3,5(2H,4H,6H)-triethanol	4719-04-4	0.1 - 1
Titanium dioxide	13463-67-7	0.1 - 1
Silica, cristobalite	14464-46-1	0.1 - 1

## 4. First-aid measures

### Description of first aid measures

<b>General advice</b>	Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get medical advice/attention.
<b>Inhalation</b>	Remove to fresh air. If symptoms persist, call a physician. If breathing has stopped, give artificial respiration. Get medical attention immediately.
<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
<b>Skin contact</b>	Wash with soap and water. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician.
<b>Ingestion</b>	Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Get medical attention.
<b>Self-protection of the first aider</b>	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid breathing vapors or mists. Use personal protective equipment as required. See section 8 for more information.

### Most important symptoms and effects, both acute and delayed

<b>Symptoms</b>	Itching. Rashes. Hives. Coughing and/ or wheezing. Difficulty in breathing.
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### Indication of any immediate medical attention and special treatment needed

<b>Note to physicians</b>	May cause sensitization in susceptible persons. Treat symptomatically.
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## 5. Fire-fighting measures

<b>Suitable Extinguishing Media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Large Fire</b>	CAUTION: Use of water spray when fighting fire may be inefficient.
<b>Unsuitable extinguishing media</b>	Do not scatter spilled material with high pressure water streams.
<b>Specific hazards arising from the chemical</b>	Product is or contains a sensitizer. May cause sensitization by skin contact.
<b>Explosion data</b>	
<b>Sensitivity to mechanical impact</b>	None.
<b>Sensitivity to static discharge</b>	None.
<b>Special protective equipment and precautions for fire-fighters</b>	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** Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Avoid breathing vapors or mists.

**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. Avoid breathing vapors or mists.

### 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
Zircon, cadmium red 72828-62-7	STEL: 10 mg/m <sup>3</sup> Zr TWA: 0.01 mg/m <sup>3</sup> Cd TWA: 0.002 mg/m <sup>3</sup> Cd respirable particulate matter TWA: 0.2 mg/m <sup>3</sup> Se TWA: 5 mg/m <sup>3</sup> Zr	TWA: 0.2 mg/m <sup>3</sup> Se TWA: 5 mg/m <sup>3</sup> Zr (vacated) TWA: 0.2 mg/m <sup>3</sup> Se (vacated) TWA: 5 mg/m <sup>3</sup> Zr (vacated) STEL: 10 mg/m <sup>3</sup> Zr	IDLH: 9 mg/m <sup>3</sup> Cd dust and fume IDLH: 1 mg/m <sup>3</sup> Se IDLH: 25 mg/m <sup>3</sup> Zr TWA: 0.2 mg/m <sup>3</sup> except Selenium hexafluoride Se TWA: 5 mg/m <sup>3</sup> except Zirconium tetrachloride Zr STEL: 10 mg/m <sup>3</sup> Zr
Frits, chemicals 65997-18-4	STEL: 10 mg/m <sup>3</sup> Zr TWA: 0.01 mg/m <sup>3</sup> As TWA: 0.05 mg/m <sup>3</sup> Pb TWA: 0.01 mg/m <sup>3</sup> Cd TWA: 0.002 mg/m <sup>3</sup> Cd respirable particulate matter	TWA: 10 µg/m <sup>3</sup> As TWA: 50 µg/m <sup>3</sup> Pb TWA: 0.5 mg/m <sup>3</sup> Sb TWA: 5 mg/m <sup>3</sup> Zr (vacated) TWA: 0.5 mg/m <sup>3</sup> Sb (vacated) TWA: 5 mg/m <sup>3</sup> Zr	IDLH: 5 mg/m <sup>3</sup> As IDLH: 9 mg/m <sup>3</sup> Cd dust and fume IDLH: 50 mg/m <sup>3</sup> Sb IDLH: 100 mg/m <sup>3</sup> Cu dust and mist

	<p>TWA: 0.5 mg/m<sup>3</sup> Sb</p> <p>TWA: 1 mg/m<sup>3</sup> Cu dust and mist</p> <p>TWA: 3 mg/m<sup>3</sup> W respirable particulate matter in the absence of cobalt</p> <p>TWA: 5 mg/m<sup>3</sup> Zr</p> <p>TWA: 0.02 mg/m<sup>3</sup> Mn respirable particulate matter</p> <p>TWA: 0.1 mg/m<sup>3</sup> Mn inhalable particulate matter</p>	<p>(vacated) STEL: 10 mg/m<sup>3</sup> Zr</p> <p>(vacated) Ceiling: 5 mg/m<sup>3</sup></p> <p>Ceiling: 5 mg/m<sup>3</sup> Mn</p>	<p>IDLH: 500 mg/m<sup>3</sup> Mn</p> <p>IDLH: 25 mg/m<sup>3</sup> Zr</p> <p>IDLH: 100 mg/m<sup>3</sup> Pb</p> <p>IDLH: 10 mg/m<sup>3</sup> Ni</p> <p>Ceiling: 0.002 mg/m<sup>3</sup> As 15 min</p> <p>Ceiling: 0.05 mg/m<sup>3</sup> V dust and fume 15 min</p> <p>TWA: 0.5 mg/m<sup>3</sup> Sb</p> <p>TWA: 1 mg/m<sup>3</sup> Cu dust and mist</p> <p>TWA: 1 mg/m<sup>3</sup> Mn</p> <p>TWA: 5 mg/m<sup>3</sup> except Zirconium tetrachloride Zr</p> <p>TWA: 0.050 mg/m<sup>3</sup> Pb</p> <p>TWA: 0.015 mg/m<sup>3</sup> except Nickel carbonyl Ni</p> <p>STEL: 3 mg/m<sup>3</sup> Mn</p> <p>STEL: 10 mg/m<sup>3</sup> Zr</p>
Kaolin 1332-58-7	<p>TWA: 2 mg/m<sup>3</sup> particulate matter containing no asbestos and &lt;1% crystalline silica, respirable particulate matter</p>	<p>TWA: 15 mg/m<sup>3</sup> total dust</p> <p>TWA: 5 mg/m<sup>3</sup> respirable fraction</p> <p>(vacated) TWA: 10 mg/m<sup>3</sup> total dust</p> <p>(vacated) TWA: 5 mg/m<sup>3</sup> respirable fraction</p>	<p>TWA: 10 mg/m<sup>3</sup> total dust</p> <p>TWA: 5 mg/m<sup>3</sup> respirable dust</p>
C.I. Pigment Yellow 159 68187-15-5	<p>STEL: 10 mg/m<sup>3</sup> Zr</p> <p>TWA: 5 mg/m<sup>3</sup> Zr</p>	<p>TWA: 5 mg/m<sup>3</sup> Zr</p> <p>(vacated) TWA: 5 mg/m<sup>3</sup> Zr</p> <p>(vacated) STEL: 10 mg/m<sup>3</sup> Zr</p>	<p>IDLH: 25 mg/m<sup>3</sup> Zr</p> <p>TWA: 5 mg/m<sup>3</sup> except Zirconium tetrachloride Zr</p> <p>STEL: 10 mg/m<sup>3</sup> Zr</p>
Zircon 14940-68-2	<p>STEL: 10 mg/m<sup>3</sup> Zr</p> <p>TWA: 5 mg/m<sup>3</sup> Zr</p>	<p>TWA: 5 mg/m<sup>3</sup> Zr</p> <p>(vacated) TWA: 5 mg/m<sup>3</sup> Zr</p> <p>(vacated) STEL: 10 mg/m<sup>3</sup> Zr</p>	<p>IDLH: 25 mg/m<sup>3</sup> Zr</p> <p>TWA: 5 mg/m<sup>3</sup> except Zirconium tetrachloride Zr</p> <p>STEL: 10 mg/m<sup>3</sup> Zr</p>
Aluminum oxide (Al <sub>2</sub> O <sub>3</sub> ) 1344-28-1	<p>TWA: 1 mg/m<sup>3</sup> respirable particulate matter</p>	<p>TWA: 15 mg/m<sup>3</sup> total dust</p> <p>TWA: 5 mg/m<sup>3</sup> respirable fraction</p> <p>(vacated) TWA: 10 mg/m<sup>3</sup> total dust</p> <p>(vacated) TWA: 5 mg/m<sup>3</sup> respirable fraction</p>	-
1,2,3-Propanetriol 56-81-5	-	<p>TWA: 15 mg/m<sup>3</sup> mist, total particulate</p> <p>TWA: 5 mg/m<sup>3</sup> mist, respirable fraction</p> <p>(vacated) TWA: 10 mg/m<sup>3</sup> mist, total particulate</p> <p>(vacated) TWA: 5 mg/m<sup>3</sup> mist, respirable fraction</p>	-
Zinc oxide (ZnO) 1314-13-2	<p>STEL: 10 mg/m<sup>3</sup> respirable particulate matter</p> <p>TWA: 2 mg/m<sup>3</sup> respirable particulate matter</p>	<p>TWA: 5 mg/m<sup>3</sup> fume</p> <p>TWA: 15 mg/m<sup>3</sup> total dust</p> <p>TWA: 5 mg/m<sup>3</sup> respirable fraction</p> <p>(vacated) TWA: 5 mg/m<sup>3</sup> fume</p> <p>(vacated) TWA: 10 mg/m<sup>3</sup> total dust</p> <p>(vacated) TWA: 5 mg/m<sup>3</sup> respirable fraction</p> <p>(vacated) STEL: 10 mg/m<sup>3</sup> fume</p>	<p>IDLH: 500 mg/m<sup>3</sup></p> <p>Ceiling: 15 mg/m<sup>3</sup> dust</p> <p>TWA: 5 mg/m<sup>3</sup> dust and fume</p> <p>STEL: 10 mg/m<sup>3</sup> fume</p>
Titanium dioxide 13463-67-7	<p>TWA: 10 mg/m<sup>3</sup></p>	<p>TWA: 15 mg/m<sup>3</sup> total dust</p> <p>(vacated) TWA: 10 mg/m<sup>3</sup> total dust</p>	<p>IDLH: 5000 mg/m<sup>3</sup></p> <p>TWA: 2.4 mg/m<sup>3</sup> CIB 63 fine</p> <p>TWA: 0.3 mg/m<sup>3</sup> CIB 63 ultrafine, including engineered nanoscale</p>

Silica, cristobalite 14464-46-1	TWA: 0.025 mg/m <sup>3</sup> respirable particulate matter	TWA: 50 µg/m <sup>3</sup> (vacated) TWA: 0.05 mg/m <sup>3</sup> respirable dust : (1/2)(250)/(%SiO <sub>2</sub> + 5) mppcf TWA respirable fraction : (1/2)(10)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA respirable fraction	IDLH: 25 mg/m <sup>3</sup> respirable dust TWA: 0.05 mg/m <sup>3</sup> respirable dust
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**Biological occupational exposure limits**

Chemical name	ACGIH
Zircon, cadmium red 72828-62-7	5 µg/g creatinine - urine (Cadmium) - not critical 5 µg/L - blood (Cadmium) - not critical
Frits, chemicals 65997-18-4	200 µg/L - blood (Lead) - not critical 5 µg/g creatinine - urine (Cadmium) - not critical 5 µg/L - blood (Cadmium) - not critical

**Appropriate engineering controls**

<b>Engineering controls</b>	Showers Eyewash stations Ventilation systems.
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**Individual protection measures, such as personal protective equipment**

<b>Eye/face protection</b>	Wear safety glasses with side shields (or goggles).
<b>Hand protection</b>	Wear suitable gloves.
<b>Skin and body protection</b>	Wear suitable protective clothing.
<b>Respiratory protection</b>	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
<b>General hygiene considerations</b>	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**

<b>Physical state</b>	Liquid
<b>Appearance</b>	
<b>Color</b>	
<b>Odor</b>	
<b>Odor threshold</b>	

<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>
<b>pH</b>	No data available	None known
<b>Melting point / freezing point</b>	No data available	None known
<b>Initial boiling point and boiling range</b>	No data available	None known
<b>Flash point</b>	No data available	None known
<b>Evaporation rate</b>	No data available	None known
<b>Flammability</b>	No data available	None known
<b>Flammability Limit in Air</b>		None known
<b>Upper flammability or explosive limits</b>	No data available	
<b>Lower flammability or explosive limits</b>	No data available	
<b>Vapor pressure</b>	No data available	None known
<b>Relative vapor density</b>	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.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	Excessive heat.
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. Harmful by inhalation. (based on components).
Eye contact	Specific test data for the substance or mixture is not available.
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). May be harmful in contact with skin.
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. Coughing and/ or wheezing.
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**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)	315.40 mg/kg
ATEmix (dermal)	3,717.70 mg/kg
ATEmix (inhalation-dust/mist)	3.82 mg/l

**Unknown acute toxicity**

9.47235 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

17.5639 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

#### 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 )	-
C.I. Pigment Yellow 159 68187-15-5	-	-	> 5.5 mg/L ( Rat ) 4 h
Aluminum oxide (Al <sub>2</sub> O <sub>3</sub> ) 1344-28-1	> 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
Zinc oxide (ZnO) 1314-13-2	> 5000 mg/kg ( Rat )	> 2000 mg/kg ( Rat )	> 5700 mg/m <sup>3</sup> ( Rat ) 4 h
1,3,5-Triazine-1,3,5(2H,4H,6H)-triethanol 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
Titanium dioxide 13463-67-7	> 10000 mg/kg ( Rat )	-	= 5.09 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** May cause an allergic skin reaction.

**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
Zircon, cadmium red 72828-62-7	A2	Group 1 Group 3	Known	X
Frits, chemicals 65997-18-4	A1 A3 A2	Group 1 Group 2B Group 2A	Known Reasonably Anticipated	X
Titanium dioxide 13463-67-7	-	Group 2B	-	X
Silica, cristobalite 14464-46-1	A2	Group 1	Known	X

#### 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	Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.
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Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
1,2,3-Propanetriol 56-81-5	-	LC50: 51 - 57mL/L (96h, Oncorhynchus mykiss)	-	-
Zinc oxide (ZnO) 1314-13-2	-	LC50: =1.55mg/L (96h, Danio rerio)	-	-
1,3,5-Triazine-1,3,5(2H,4H,6H)-triethanol 4719-04-4	-	LC50: =16.07mg/L (96h, Danio rerio)	-	-

### Persistence and degradability

### Bioaccumulation

#### Component Information

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

Other adverse effects	No information available.
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## 13. Disposal considerations

### Disposal methods

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

<b>UN number or ID number</b>	UN3082
<b>Proper shipping name</b>	Environmentally hazardous substance, liquid, n.o.s.
<b>Transport hazard class(es)</b>	9
<b>Packing group</b>	III
<b>Special Provisions</b>	8, 146, 173, 335, IB3, T4, TP1, TP29
<b>DOT Marine Pollutant</b>	PP
<b>Marine pollutant</b>	Zircon, cadmium red, Frits, chemicals
<b>Description</b>	UN3082, Environmentally hazardous substance, liquid, n.o.s. (Zircon, cadmium red, Frits, chemicals), 9, III, Marine pollutant
<b>Emergency Response Guide Number</b>	171

### TDG

<b>UN number or ID number</b>	UN3082
<b>UN proper shipping name</b>	Environmentally hazardous substance, liquid, n.o.s.
<b>Transport hazard class(es)</b>	9
<b>Packing group</b>	III
<b>Special Provisions</b>	16, 99
<b>Marine pollutant name</b>	Zircon, cadmium red, Frits, chemicals.
<b>Description</b>	UN3082, Environmentally hazardous substance, liquid, n.o.s. (Zircon, cadmium red, Frits, chemicals), 9, III

### MEX

<b>UN number or ID number</b>	UN3082
<b>UN proper shipping name</b>	Environmentally hazardous substance, liquid, n.o.s.
<b>Transport hazard class(es)</b>	9
<b>Packing group</b>	III
<b>Technical Name</b>	Zircon, cadmium red, Frits, chemicals
<b>Description</b>	UN3082, Environmentally hazardous substance, liquid, n.o.s. (Zircon, cadmium red, Frits, chemicals), 9, III
<b>Special Provisions</b>	274, 331, 335

### ICAO (air)

<b>UN number or ID number</b>	UN3082
<b>UN proper shipping name</b>	Environmentally hazardous substance, liquid, n.o.s.
<b>Transport hazard class(es)</b>	9
<b>Packing group</b>	III
<b>Description</b>	UN3082, Environmentally hazardous substance, liquid, n.o.s. (Zircon, cadmium red, Frits, chemicals), 9, III
<b>Special Provisions</b>	A97, A158, A197, A215

### IATA

<b>UN number or ID number</b>	UN3082
<b>UN proper shipping name</b>	Environmentally hazardous substance, liquid, n.o.s.
<b>Transport hazard class(es)</b>	9
<b>Packing group</b>	III
<b>Technical Name</b>	Zircon, cadmium red, Frits, chemicals
<b>Description</b>	UN3082, Environmentally hazardous substance, liquid, n.o.s. (Zircon, cadmium red, Frits, chemicals), 9, III
<b>Special Provisions</b>	A97, A158, A197
<b>ERG Code</b>	9L

### IMDG

<b>UN number or ID number</b>	UN3082
<b>UN proper shipping name</b>	Environmentally hazardous substance, liquid, n.o.s.
<b>Transport hazard class(es)</b>	9
<b>Packing group</b>	III
<b>EmS-No</b>	F-A, S-F

**Special Provisions** 274, 335, 969  
**Marine pollutant** P  
**Marine Pollutant** Zircon, cadmium red, Frits, chemicals  
**Description** UN3082, Environmentally hazardous substance, liquid, n.o.s. (Zircon, cadmium red, 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. (Zircon, cadmium red, Frits, chemicals), 9, III

**ADR**

**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. (Zircon, cadmium red, 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. (Zircon, cadmium red, 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
Zircon, cadmium red	72828-62-7	Present	Active
Frits, chemicals	65997-18-4	Present	Active
Kaolin	1332-58-7	Present	Active
C.I. Pigment Yellow 159	68187-15-5	Present	Active
Zircon	14940-68-2	Present	Active
Bentone EW	89382-86-5	-	Unknown *
Aluminum oxide (Al <sub>2</sub> O <sub>3</sub> )	1344-28-1	Present	Active
1,2,3-Propanetriol	56-81-5	Present	Active
Sodium carboxymethyl cellulose	9004-32-4	Present	Active
Zinc oxide (ZnO)	1314-13-2	Present	Active
Quartz	14808-60-7	Present	Active
Polyphosphoric acids, sodium salts	68915-31-1	Present	Active
1,3,5-Triazine-1,3,5(2H,4H,6H)-triethanol	4719-04-4	Present	Active
Mica	12001-26-2	-	Unknown *

Chemical name	CAS No	US TSCA Inventory listing	US TSCA inactive/active designation
Titanium dioxide	13463-67-7	Present	Active
Silica, cristobalite	14464-46-1	Present	Active
Ethanolamine	141-43-5	Present	Active

\*Contact supplier for details. One or more substances in this product are either not listed on the US TSCA inventory, listed on the confidential US TSCA inventory or are otherwise exempted from inventory listing requirements

<b>DSL/NDL</b>	Contact supplier for inventory compliance status.
<b>EINECS/ELINCS</b>	Contact supplier for inventory compliance status.
<b>ENCS</b>	Contact supplier for inventory compliance status.
<b>IECSC</b>	Contact supplier for inventory compliance status.
<b>KECL</b>	Contact supplier for inventory compliance status.
<b>PICCS</b>	Contact supplier for inventory compliance status.
<b>AIIC</b>	Contact supplier for inventory compliance status.
<b>NZIoC</b>	Contact supplier for inventory compliance status.

**Legend:**

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

**DSL/NDL** - 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 %
Zircon, cadmium red - 72828-62-7	0.1 1.0
Frits, chemicals - 65997-18-4	0.1 1.0
Aluminum oxide (Al <sub>2</sub> O <sub>3</sub> ) - 1344-28-1	1.0
Zinc oxide (ZnO) - 1314-13-2	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
Zircon, cadmium red 72828-62-7	-	X	-	-
Frits, chemicals 65997-18-4	-	X	-	-
Zinc oxide (ZnO) 1314-13-2	-	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
Zircon, cadmium red 72828-62-7	X	-	X
Frits, chemicals 65997-18-4	X	-	X
Kaolin 1332-58-7	X	X	X
Aluminum oxide (Al <sub>2</sub> O <sub>3</sub> ) 1344-28-1	X	X	X
1,2,3-Propanetriol 56-81-5	X	X	X
Zinc oxide (ZnO) 1314-13-2	X	X	X
Quartz 14808-60-7	X	X	X
Mica 12001-26-2	X	-	X
Titanium dioxide 13463-67-7	X	X	X
Silica, cristobalite 14464-46-1	X	X	X
Ethanolamine 141-43-5	X	X	X

#### U.S. EPA Label Information

**EPA Pesticide Registration Number** Not applicable

## 16. Other information

**NFPA** Health hazards 2 Flammability 0 Instability 0 Special hazards -  
**HMIS** Health 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  
 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** 29-May-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**