

83444-3070

# SAFETY DATA SHEET



Revision date 12-Sep-2024

Revision Number 1

## 1. Identification

### Product identifier

**Product Name** VS-387 Bright Red

### Other means of identification

**Product Code(s)** FG00193

**Synonyms** 01435X

### 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 1A |
| Specific target organ toxicity (repeated exposure) | Category 2  |

### Hazards not otherwise classified (HNOC)

Not applicable

### Label elements

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**Hazard statements****Danger**

H302 - Harmful if swallowed

H350 - May cause cancer

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

EUH208 - Contains ( . ? ). May produce an allergic reaction

**Physical state** Aerosol**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**

39.03035 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

**Other information**

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

**3. Composition/information on ingredients**

Not applicable.

**Mixture**

| Chemical name       | CAS No       | Weight-% |
|---------------------|--------------|----------|
| Dimethyl ether      | 115-10-6     | 40 - 60  |
| Water               | 7732-18-5    | 20 - 40  |
| Zircon, cadmium red | 72828-62-7   | 5 - <10  |
| Quartz              | 14808-60-7   | 1 - <3   |
| Kaolin              | 1332-58-7    | 1 - <3   |
| Frits, chemicals    | 65997-18-4   | 1 - <3   |
| Nepheline syenite   | 37244-96-5   | 1 - <3   |
| 1,2,3-Propanetriol  | 56-81-5      | 1 - <3   |
| Bentone EW          | 89382-86-5   | 0.1 - 1  |
| Laponite            | Trade secret | 0.1 - 1  |

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|   |             |         |
|---|-------------|---------|
| Polyphosphoric acids, sodium salts        | 68915-31-1  | 0.1 - 1 |
| Amorphous Silica                          | 112926-00-8 | 0.1 - 1 |
| Zinc oxide (ZnO)                          | 1314-13-2   | <0.1    |
| 1,3,5-Triazine-1,3,5(2H,4H,6H)-triethanol | 4719-04-4   | <0.1    |
| Titanium dioxide                          | 13463-67-7  | <0.1    |
| Mica                                      | 12001-26-2  | <0.1    |
| Silica, cristobalite                      | 14464-46-1  | <0.1    |
| Ethanolamine                              | 141-43-5    | <0.1    |

**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.   |
| <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 skin with soap and water.   |
| <b>Ingestion</b>      | 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**

|                 |                           |
|-----------------|---------------------------|
| <b>Symptoms</b> | No information available. |
|-----------------|---------------------------|

**Indication of any immediate medical attention and special treatment needed**

|                           |                        |
|---------------------------|------------------------|
| <b>Note to physicians</b> | Treat symptomatically. |
|---------------------------|------------------------|

**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>                     | No information available.  |
| <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**

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**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 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.

**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  |
|-----------------------------------|---|---|--|
| Zircon, cadmium red<br>72828-62-7 | STEL: 10 mg/m <sup>3</sup> Zr<br>TWA: 0.01 mg/m <sup>3</sup> Cd<br>TWA: 0.002 mg/m <sup>3</sup> Cd<br>respirable particulate matter<br>TWA: 0.2 mg/m <sup>3</sup> Se<br>TWA: 5 mg/m <sup>3</sup> Zr | TWA: 0.2 mg/m <sup>3</sup> Se<br>TWA: 5 mg/m <sup>3</sup> Zr<br>(vacated) TWA: 0.2 mg/m <sup>3</sup> Se<br>(vacated) TWA: 5 mg/m <sup>3</sup> Zr<br>(vacated) STEL: 10 mg/m <sup>3</sup> Zr   | IDLH: 9 mg/m <sup>3</sup> Cd dust and fume<br>IDLH: 1 mg/m <sup>3</sup> Se<br>IDLH: 25 mg/m <sup>3</sup> Zr<br>TWA: 0.2 mg/m <sup>3</sup> except<br>Selenium hexafluoride Se<br>TWA: 5 mg/m <sup>3</sup> except Zirconium<br>tetrachloride Zr<br>STEL: 10 mg/m <sup>3</sup> Zr |
| Quartz<br>14808-60-7              | TWA: 0.025 mg/m <sup>3</sup> respirable<br>particulate matter   | TWA: 50 µg/m <sup>3</sup><br>(vacated) TWA: 0.1 mg/m <sup>3</sup><br>respirable dust<br>: (250)/(%SiO <sub>2</sub> + 5) mppcf<br>TWA respirable fraction<br>: (10)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup><br>TWA respirable fraction | IDLH: 50 mg/m <sup>3</sup> respirable dust<br>TWA: 0.05 mg/m <sup>3</sup> respirable<br>dust   |
| Kaolin<br>1332-58-7               | TWA: 2 mg/m <sup>3</sup> particulate<br>matter containing no asbestos<br>and <1% crystalline silica,<br>respirable particulate matter   | TWA: 15 mg/m <sup>3</sup> total dust<br>TWA: 5 mg/m <sup>3</sup> respirable<br>fraction<br>(vacated) TWA: 10 mg/m <sup>3</sup> total<br>dust<br>(vacated) TWA: 5 mg/m <sup>3</sup><br>respirable fraction                               | TWA: 10 mg/m <sup>3</sup> total dust<br>TWA: 5 mg/m <sup>3</sup> respirable dust   |
| Frits, chemicals                  | STEL: 10 mg/m <sup>3</sup> Zr   | TWA: 10 µg/m <sup>3</sup> As  | IDLH: 5 mg/m <sup>3</sup> As   |

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|                                    |  |   |  |
|------------------------------------|--|---|--|
| 65997-18-4                         | <p>TWA: 0.01 mg/m<sup>3</sup> As<br/> TWA: 0.05 mg/m<sup>3</sup> Pb<br/> TWA: 0.01 mg/m<sup>3</sup> Cd<br/> TWA: 0.002 mg/m<sup>3</sup> Cd respirable particulate matter<br/> TWA: 0.5 mg/m<sup>3</sup> Sb<br/> TWA: 1 mg/m<sup>3</sup> Cu dust and mist<br/> TWA: 3 mg/m<sup>3</sup> W respirable particulate matter in the absence of cobalt<br/> TWA: 5 mg/m<sup>3</sup> Zr<br/> TWA: 0.02 mg/m<sup>3</sup> Mn respirable particulate matter<br/> TWA: 0.1 mg/m<sup>3</sup> Mn inhalable particulate matter</p> | <p>TWA: 50 µg/m<sup>3</sup> Pb<br/> TWA: 0.5 mg/m<sup>3</sup> Sb<br/> TWA: 5 mg/m<sup>3</sup> Zr<br/> (vacated) TWA: 0.5 mg/m<sup>3</sup> Sb<br/> (vacated) TWA: 5 mg/m<sup>3</sup> Zr<br/> (vacated) STEL: 10 mg/m<sup>3</sup> Zr<br/> (vacated) Ceiling: 5 mg/m<sup>3</sup><br/> Ceiling: 5 mg/m<sup>3</sup> Mn</p>                 | <p>IDLH: 9 mg/m<sup>3</sup> Cd dust and fume<br/> IDLH: 50 mg/m<sup>3</sup> Sb<br/> IDLH: 100 mg/m<sup>3</sup> Cu dust and mist<br/> IDLH: 500 mg/m<sup>3</sup> Mn<br/> IDLH: 25 mg/m<sup>3</sup> Zr<br/> IDLH: 100 mg/m<sup>3</sup> Pb<br/> IDLH: 10 mg/m<sup>3</sup> Ni<br/> Ceiling: 0.002 mg/m<sup>3</sup> As 15 min<br/> Ceiling: 0.05 mg/m<sup>3</sup> V dust and fume 15 min<br/> TWA: 0.5 mg/m<sup>3</sup> Sb<br/> TWA: 1 mg/m<sup>3</sup> Cu dust and mist<br/> TWA: 1 mg/m<sup>3</sup> Mn<br/> TWA: 5 mg/m<sup>3</sup> except Zirconium tetrachloride Zr<br/> TWA: 0.050 mg/m<sup>3</sup> Pb<br/> TWA: 0.015 mg/m<sup>3</sup> except Nickel carbonyl Ni<br/> STEL: 3 mg/m<sup>3</sup> Mn<br/> STEL: 10 mg/m<sup>3</sup> Zr</p> |
| 1,2,3-Propanetriol<br>56-81-5      | -  | <p>TWA: 15 mg/m<sup>3</sup> mist, total particulate<br/> TWA: 5 mg/m<sup>3</sup> mist, respirable fraction<br/> (vacated) TWA: 10 mg/m<sup>3</sup> mist, total particulate<br/> (vacated) TWA: 5 mg/m<sup>3</sup> mist, respirable fraction</p>   | -  |
| Amorphous Silica<br>112926-00-8    | -  | <p>TWA: 20 mppcf<br/> : (80)/(% SiO<sub>2</sub>) mg/m<sup>3</sup><br/> TWA<br/> (vacated) TWA: 6 mg/m<sup>3</sup><br/> : (80)/(% SiO<sub>2</sub>) mg/m<sup>3</sup> TWA</p>  | <p>IDLH: 3000 mg/m<sup>3</sup><br/> TWA: 6 mg/m<sup>3</sup></p>  |
| Zinc oxide (ZnO)<br>1314-13-2      | <p>STEL: 10 mg/m<sup>3</sup> respirable particulate matter<br/> TWA: 2 mg/m<sup>3</sup> respirable particulate matter</p>  | <p>TWA: 5 mg/m<sup>3</sup> fume<br/> TWA: 15 mg/m<sup>3</sup> total dust<br/> TWA: 5 mg/m<sup>3</sup> respirable fraction<br/> (vacated) TWA: 5 mg/m<sup>3</sup> fume<br/> (vacated) TWA: 10 mg/m<sup>3</sup> total dust<br/> (vacated) TWA: 5 mg/m<sup>3</sup> respirable fraction<br/> (vacated) STEL: 10 mg/m<sup>3</sup> fume</p> | <p>IDLH: 500 mg/m<sup>3</sup><br/> Ceiling: 15 mg/m<sup>3</sup> dust<br/> TWA: 5 mg/m<sup>3</sup> dust and fume<br/> STEL: 10 mg/m<sup>3</sup> fume</p>  |
| Titanium dioxide<br>13463-67-7     | TWA: 10 mg/m <sup>3</sup>  | <p>TWA: 15 mg/m<sup>3</sup> total dust<br/> (vacated) TWA: 10 mg/m<sup>3</sup> total dust</p>   | <p>IDLH: 5000 mg/m<sup>3</sup><br/> TWA: 2.4 mg/m<sup>3</sup> CIB 63 fine<br/> TWA: 0.3 mg/m<sup>3</sup> CIB 63 ultrafine, including engineered nanoscale</p>  |
| Mica<br>12001-26-2                 | TWA: 0.1 mg/m <sup>3</sup> respirable particulate matter   | <p>(vacated) TWA: 3 mg/m<sup>3</sup> respirable dust &lt;1% Crystalline silica<br/> TWA: 20 mppcf &lt;1% Crystalline silica</p>   | <p>IDLH: 1500 mg/m<sup>3</sup><br/> TWA: 3 mg/m<sup>3</sup> containing &lt;1% Quartz respirable dust</p>   |
| Silica, cristobalite<br>14464-46-1 | TWA: 0.025 mg/m <sup>3</sup> respirable particulate matter   | <p>TWA: 50 µg/m<sup>3</sup><br/> (vacated) TWA: 0.05 mg/m<sup>3</sup> respirable dust<br/> : (1/2)(250)/(%SiO<sub>2</sub> + 5) mppcf TWA respirable fraction</p>  | <p>IDLH: 25 mg/m<sup>3</sup> respirable dust<br/> TWA: 0.05 mg/m<sup>3</sup> respirable dust</p>   |

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|                          |                           |   |   |
|--------------------------|---------------------------|---|---|
|                          |                           | : (1/2)(10)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup><br>TWA respirable fraction  |   |
| Ethanolamine<br>141-43-5 | STEL: 6 ppm<br>TWA: 3 ppm | TWA: 3 ppm<br>TWA: 6 mg/m <sup>3</sup><br>(vacated) TWA: 3 ppm<br>(vacated) TWA: 8 mg/m <sup>3</sup><br>(vacated) STEL: 6 ppm<br>(vacated) STEL: 15 mg/m <sup>3</sup> | IDLH: 30 ppm<br>TWA: 3 ppm<br>TWA: 8 mg/m <sup>3</sup><br>STEL: 6 ppm<br>STEL: 15 mg/m <sup>3</sup> |

## Biological occupational exposure limits

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

## Hand protection

Wear suitable gloves.

## Skin and body protection

Wear suitable protective clothing.

## 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

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 Aerosol

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 range

No 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

No data available

None known

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|   |                   |            |
|---|-------------------|------------|
| <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 |
| <b>Relative density</b>                       | No data available | None known |
| <b>Water solubility</b>                       | No data available | None known |
| <b>Solubility(ies)</b>                        | No data available | None known |
| <b>Partition coefficient</b>                  | No data available | None known |
| <b>Autoignition temperature</b>               | No data available | None known |
| <b>Decomposition temperature</b>              |                   | None known |
| <b>Kinematic viscosity</b>                    | No data available | None known |
| <b>Dynamic viscosity</b>                      | No data available | None known |

Other information

|                             |                          |
|-----------------------------|--------------------------|
| <b>Explosive properties</b> | No information available |
| <b>Oxidizing properties</b> | No information available |
| <b>VOC Content (%)</b>      | No information available |

**10. Stability and reactivity**

|   |   |
|---|---|
| <b>Reactivity</b>                         | No information available.                 |
| <b>Chemical stability</b>                 | Stable under normal conditions.           |
| <b>Possibility of hazardous reactions</b> | None under normal processing.             |
| <b>Conditions to avoid</b>                | None known based on information supplied. |
| <b>Incompatible materials</b>             | None known based on information supplied. |
| <b>Hazardous decomposition products</b>   | None known based on information supplied. |

**11. Toxicological information**Information on likely routes of exposure**Product Information**

|                     |  |
|---------------------|--|
| <b>Inhalation</b>   | Specific test data for the substance or mixture is not available.  |
| <b>Eye contact</b>  | Specific test data for the substance or mixture is not available.  |
| <b>Skin contact</b> | Specific test data for the substance or mixture is not available.  |
| <b>Ingestion</b>    | 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

|                 |                           |
|-----------------|---------------------------|
| <b>Symptoms</b> | 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**

|                                      |                |
|--------------------------------------|----------------|
| <b>ATEmix (oral)</b>                 | 570.70 mg/kg   |
| <b>ATEmix (dermal)</b>               | 6,515.10 mg/kg |
| <b>ATEmix (inhalation-dust/mist)</b> | 8.30 mg/l      |

**FG00193 - VS-387 Bright Red****Revision date** 12-Sep-2024**Unknown acute toxicity**

39.03035 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

**Component Information**

| Chemical name   | Oral LD50             | Dermal LD50             | Inhalation LC50                                    |
|---|-----------------------|-------------------------|--|
| Dimethyl ether<br>115-10-6                                  | -                     | -                       | = 164000 ppm ( Rat ) 4 h                           |
| Water<br>7732-18-5  | > 90 mL/kg ( Rat )    | -                       | -  |
| Kaolin<br>1332-58-7   | > 5000 mg/kg ( Rat )  | > 5000 mg/kg ( Rat )    | -  |
| Frits, chemicals<br>65997-18-4                              | > 2000 mg/kg ( Rat )  | > 2000 mg/kg ( Rat )    | -  |
| 1,2,3-Propanetriol<br>56-81-5                               | = 12600 mg/kg ( Rat ) | > 10 g/kg ( Rabbit )    | > 2.75 mg/L ( Rat ) 4 h                            |
| Laponite  | -                     | > 2000 mg/kg ( Rabbit ) | > 200 mg/L ( Rat ) 1 h                             |
| Polyphosphoric acids, sodium<br>salts<br>68915-31-1         | = 3053 mg/kg ( Rat )  | -                       | -  |
| Amorphous Silica<br>112926-00-8                             | = 7900 mg/kg ( Rat )  | > 5000 mg/kg ( Rabbit ) | > 58.8 mg/L ( Rat ) 4 h                            |
| Zinc oxide (ZnO)<br>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)-t<br>riethanol<br>4719-04-4 | = 763 mg/kg ( Rat )   | > 4000 mg/kg ( Rat )    | = 0.4 mg/L ( Rat ) 4 h<br>= 0.338 mg/L ( Rat ) 4 h |
| Titanium dioxide<br>13463-67-7                              | > 10000 mg/kg ( Rat ) | -                       | = 5.09 mg/L ( Rat ) 4 h                            |
| Ethanolamine<br>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/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** 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<br>72828-62-7 | A2             | Group 1<br>Group 3              | Known                           | X    |
| Quartz<br>14808-60-7              | A2             | Group 1                         | Known                           | X    |
| Frits, chemicals<br>65997-18-4    | A1<br>A3<br>A2 | Group 1<br>Group 2B<br>Group 2A | Known<br>Reasonably Anticipated | X    |
| Amorphous Silica<br>112926-00-8   | -              | Group 3                         | -                               | -    |
| Titanium dioxide                  | -              | Group 2B                        | -                               | X    |



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|--|----|---------|-------|---|
| 13463-67-7<br>Silica, cristobalite<br>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** Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

| Chemical name                             | Algae/aquatic plants  | Fish   | Toxicity to microorganisms | Crustacea   |
|---|---|--|----------------------------|---|
| Dimethyl ether<br>115-10-6                | -   | LC50: >4.1g/L (96h, <i>Poecilia reticulata</i> )     | -                          | -   |
| 1,2,3-Propanetriol<br>56-81-5             | -   | LC50: 51 - 57mL/L (96h, <i>Oncorhynchus mykiss</i> ) | -                          | -   |
| Amorphous Silica<br>112926-00-8           | EC50: =440mg/L (72h, <i>Pseudokirchneriella subcapitata</i> ) | LC50: =5000mg/L (96h, <i>Brachydanio rerio</i> )     | -                          | EC50: =7600mg/L (48h, <i>Ceriodaphnia dubia</i> ) |
| Zinc oxide (ZnO)<br>1314-13-2             | -   | LC50: =1.55mg/L (96h, <i>Danio rerio</i> )           | -                          | -   |
| 1,3,5-Triazine-1,3,5(2H,4H,6H)-triethanol | -   | LC50: =16.07mg/L (96h, <i>Danio rerio</i> )          | -                          | -   |

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|                                       |  |  |   |                                       |
|---------------------------------------|--|--|---|---------------------------------------|
| 4719-04-4<br>Ethanolamine<br>141-43-5 | EC50: =15mg/L (72h,<br>Desmodesmus<br>subspicatus) | LC50: =227mg/L (96h,<br>Pimephales promelas)<br>LC50: =3684mg/L (96h,<br>Brachydanio rerio)<br>LC50: 300 - 1000mg/L<br>(96h, Lepomis<br>macrochirus)<br>LC50: 114 - 196mg/L<br>(96h, Oncorhynchus<br>mykiss)<br>LC50: >200mg/L (96h,<br>Oncorhynchus mykiss) | - | EC50: =65mg/L (48h,<br>Daphnia magna) |
|---------------------------------------|--|--|---|---------------------------------------|

**Persistence and degradability****Bioaccumulation**

There is no data for this product.

| Chemical name                 | Partition coefficient |
|-------------------------------|-----------------------|
| Dimethyl ether<br>115-10-6    | -0.18                 |
| 1,2,3-Propanetriol<br>56-81-5 | -1.76                 |
| Ethanolamine<br>141-43-5      | -1.91                 |

**Other adverse effects**

No information available.

**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**

Not regulated

**UN number or ID number  
Packing group**UN 1950  
III**15. Regulatory information**

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Contact supplier for inventory compliance status.

| Chemical name                              | CAS No      | US TSCA Inventory listing | US TSCA inactive/active designation |
|--|-------------|---------------------------|-------------------------------------|
| Dimethyl ether                             | 115-10-6    | Present                   | Active                              |
| Water                                      | 7732-18-5   | Present                   | Active                              |
| Zircon, cadmium red                        | 72828-62-7  | Present                   | Active                              |
| Quartz                                     | 14808-60-7  | Present                   | Active                              |
| Kaolin                                     | 1332-58-7   | Present                   | Active                              |
| Frits, chemicals                           | 65997-18-4  | Present                   | Active                              |
| Nepheline syenite                          | 37244-96-5  | -                         | Unknown *                           |
| 1,2,3-Propanetriol                         | 56-81-5     | Present                   | Active                              |
| Bentone EW                                 | 89382-86-5  | -                         | Unknown *                           |
| Laponite                                   | -           | Present                   | Active                              |
| Polyphosphoric acids, sodium salts         | 68915-31-1  | Present                   | Active                              |
| Amorphous Silica                           | 112926-00-8 | Present                   | Active                              |
| Zinc oxide (ZnO)                           | 1314-13-2   | Present                   | Active                              |
| 1,3,5-Triazine-1,3,5(2H,4H,6H)-trietha nol | 4719-04-4   | Present                   | Active                              |
| Titanium dioxide                           | 13463-67-7  | Present                   | Active                              |
| Mica                                       | 12001-26-2  | -                         | Unknown *                           |
| 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

**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.

**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 % |
|----------------------------------|-------------------------------|
| Zircon, cadmium red - 72828-62-7 | 0.1                           |

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|                               |     |
|-------------------------------|-----|
|                               | 1.0 |
| Frits, chemicals - 65997-18-4 | 0.1 |
|                               | 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<br>72828-62-7 | -                           | X                      | -                         | -                          |
| Frits, chemicals<br>65997-18-4    | -                           | X                      | -                         | -                          |
| Zinc oxide (ZnO)<br>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 |
|------------------------------------|------------|---------------|--------------|
| Dimethyl ether<br>115-10-6         | X          | X             | X            |
| Water<br>7732-18-5                 | -          | -             | X            |
| Zircon, cadmium red<br>72828-62-7  | X          | -             | X            |
| Quartz<br>14808-60-7               | X          | X             | X            |
| Kaolin<br>1332-58-7                | X          | X             | X            |
| Frits, chemicals<br>65997-18-4     | X          | -             | X            |
| 1,2,3-Propanetriol<br>56-81-5      | X          | X             | X            |
| Amorphous Silica<br>112926-00-8    | X          | -             | X            |
| Zinc oxide (ZnO)<br>1314-13-2      | X          | X             | X            |
| Titanium dioxide<br>13463-67-7     | X          | X             | X            |
| Mica<br>12001-26-2                 | X          | -             | X            |
| Silica, cristobalite<br>14464-46-1 | X          | X             | X            |
| Ethanolamine<br>141-43-5           | X          | X             | X            |

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**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

**16. Other information**

|   |                          |                       |                           |                              |
|---|--------------------------|-----------------------|---------------------------|------------------------------|
| <b>NFPA</b>   | <b>Health hazards</b> 2  | <b>Flammability</b> 0 | <b>Instability</b> 0      | <b>Special hazards</b> -     |
| <b>HMIS</b>   | <b>Health hazards</b> 1* | <b>Flammability</b> 0 | <b>Physical hazards</b> 0 | <b>Personal protection</b> X |
| <i>Chronic Hazard Star Legend</i> * = 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

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**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**