# SAFETY DATA SHEET

## 1. Identification

**Material name:** UNIVERSAL COLOR PACK IRONSTONE-cs
**Material:** 01558073Q529

**Recommended use and restriction on use**

**Recommended use:** Colorant
**Restrictions on use:** Not known.

**Manufacturer/Importer/Supplier/Distributor Information**

EUCLID CHEMICAL COMPANY
19218 REDWOOD ROAD
CLEVELAND OH 44110
US

| | |
|---|---|
| **Contact person:** | EH&S Department |
| **Telephone:** | 216-531-9222 |
| **Emergency telephone number:** | 1-800-424-9300 (US); 1-613-996-6666 (Canada) |

## 2. Hazard(s) identification

**Hazard Classification**

**Health Hazards**

| | |
|---|---|
| Carcinogenicity | Category 2 |

**Unknown toxicity - Health**

| | |
|---|---|
| Acute toxicity, oral | 14.83 % |
| Acute toxicity, dermal | 48.25 % |
| Acute toxicity, inhalation, vapor | 100 % |
| Acute toxicity, inhalation, dust or mist | 99.78 % |

**Environmental Hazards**

| | |
|---|---|
| Acute hazards to the aquatic environment | Category 1 |

**Unknown toxicity - Environment**

| | |
|---|---|
| Acute hazards to the aquatic environment | 29.18 % |
| Chronic hazards to the aquatic environment | 100 % |

**Label Elements**

**Hazard Symbol:**

**Signal Word:** Warning

**Hazard Statement:** Suspected of causing cancer.
Very toxic to aquatic life.

**Precautionary Statements**

**Prevention:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Avoid release to the environment.

**Response:** IF exposed or concerned: Get medical advice/attention. Collect spillage.

**Storage:** Store locked up.

**Disposal:** Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Hazard(s) not otherwise classified (HNOC):** None.

## 3. Composition/information on ingredients

**Mixtures**

| Chemical Identity | CAS number | Content in percent (%)* |
|---|---|---|
| Titanium dioxide | 13463-67-7 | 15 - 40% |
| Carbon Black | 1333-86-4 | 5 - 10% |
| Iron oxide | 1309-37-1 | 5 - 10% |
| Aluminum oxide | 1344-28-1 | 1 - 5% |
| Amorphous silica | 7631-86-9 | 0.1 - 1% |
| Zirconium dioxide | 1314-23-4 | 0.1 - 1% |

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

## 4. First-aid measures

**Description of necessary first-aid measures**

**Inhalation:** Move to fresh air.

**Skin Contact:** Wash skin thoroughly with soap and water. Get medical attention if symptoms occur.

| | |
|---|---|
| **Eye contact:** | Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. If eye irritation persists: Get medical advice/attention. |
| **Ingestion:** | Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. |
| **Personal Protection for First-aid Responders:** | Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |

**Most important symptoms/effects, acute and delayed**

| | |
|---|---|
| **Symptoms:** | May cause skin and eye irritation. |
| **Hazards:** | No data available. |

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

| | |
|---|---|
| **Treatment:** | Symptoms may be delayed. |

## 5. Fire-fighting measures

| | |
|---|---|
| **General Fire Hazards:** | No unusual fire or explosion hazards noted. |

**Suitable (and unsuitable) extinguishing media**

| | |
|---|---|
| **Suitable extinguishing media:** | Use fire-extinguishing media appropriate for surrounding materials. |
| **Unsuitable extinguishing media:** | Do not use water jet as an extinguisher, as this will spread the fire. |
| **Specific hazards arising from the chemical:** | During fire, gases hazardous to health may be formed. |

**Special protective equipment and precautions for fire-fighters**

| | |
|---|---|
| **Special fire-fighting procedures:** | No data available. |
| **Special protective equipment for fire-fighters:** | Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |

## 6. Accidental release measures

| | |
|---|---|
| **Personal precautions, protective equipment and emergency procedures:** | No data available. |
| **Accidental release measures:** | In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. |

| | |
|---|---|
| **Methods and material for containment and cleaning up:** | Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations. |
| **Environmental Precautions:** | Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid release to the environment. |

## 7. Handling and storage

### Handling

| | |
|---|---|
| **Technical measures (e.g. Local and general ventilation):** | Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required. |
| **Safe handling advice:** | Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required.Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. |
| **Contact avoidance measures:** | No data available. |
| **Hygiene measures:** | Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. |

### Storage

| | |
|---|---|
| **Safe storage conditions:** | Store locked up. |
| **Safe packaging materials:** | No data available. |

## 8. Exposure controls/personal protection

### Control Parameters

#### Occupational Exposure Limits

| Chemical Identity | Type | Exposure Limit Values | Source |
|---|---|---|---|
| Titanium dioxide - Total dust | PEL | 15 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006) |
| Titanium dioxide - Respirable fraction | TWA | 15 millions of particles per cubic foot of air | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016) |
| Titanium dioxide - Total dust | TWA | 15 mg/m3 | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016) |
| Titanium dioxide - Respirable fraction | TWA | 5 mg/m3 | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016) |
| Titanium dioxide - Total dust | TWA | 50 millions of particles per cubic foot of air | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016) |
| Titanium dioxide - Respirable finescale particles | TWA | 2.5 mg/m3 | US. ACGIH Threshold Limit Values, as amended (01 2022) |
| Titanium dioxide - Respirable nanoscale particles | TWA | 0.2 mg/m3 | US. ACGIH Threshold Limit Values, as amended (01 2022) |
| Carbon Black | PEL | 3.5 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006) |
| Carbon Black - Inhalable | TWA | 3 mg/m3 | US. ACGIH Threshold Limit Values, as |

| | | | |
|---|---|---|---|
| fraction | | | amended (12 2010) |
| Carbon Black - Respirable fraction | TWA | 5 mg/m3 | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (09 2016) |
| | TWA | 15 millions of particles per cubic foot of air | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (09 2016) |
| Carbon Black - Total dust | TWA | 50 millions of particles per cubic foot of air | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (09 2016) |
| | TWA | 15 mg/m3 | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (09 2016) |
| Iron oxide - Fume | PEL | 10 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006) |
| Iron oxide - Respirable fraction | TWA | 5 mg/m3 | US. ACGIH Threshold Limit Values, as amended (01 2010) |
| Iron oxide - Total dust | TWA | 50 millions of particles per cubic foot of air | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016) |
| Iron oxide - Respirable fraction | TWA | 5 mg/m3 | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016) |
| | TWA | 15 millions of particles per cubic foot of air | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016) |
| Iron oxide - Total dust | TWA | 15 mg/m3 | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016) |
| Aluminum oxide - Respirable fraction | PEL | 5 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006) |
| Aluminum oxide - Total dust | PEL | 15 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006) |
| | TWA | 50 millions of particles per cubic foot of air | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016) |
| Aluminum oxide - Respirable fraction | TWA | 15 millions of particles per cubic foot of air | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016) |
| | TWA | 5 mg/m3 | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016) |
| Aluminum oxide - Total dust | TWA | 15 mg/m3 | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016) |
| Aluminum oxide - Inhalable particles | TWA | 10 mg/m3 | US. ACGIH Threshold Limit Values, as amended (01 2021) |
| Aluminum oxide - Respirable particles | TWA | 3 mg/m3 | US. ACGIH Threshold Limit Values, as amended (01 2021) |
| Aluminum oxide - Respirable fraction | TWA | 1 mg/m3 | US. ACGIH Threshold Limit Values, as amended (01 2025) |
| Amorphous silica - Inhalable particles | TWA | 10 mg/m3 | US. ACGIH Threshold Limit Values, as amended (01 2021) |
| Amorphous silica - Respirable particles | TWA | 3 mg/m3 | US. ACGIH Threshold Limit Values, as amended (01 2021) |
| Amorphous silica - Respirable fraction | TWA | 5 mg/m3 | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (09 2016) |
| Amorphous silica - Total dust | TWA | 15 mg/m3 | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (09 2016) |
| | TWA | 50 millions of particles per cubic foot of air | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (09 2016) |
| Amorphous silica - Respirable fraction | TWA | 15 millions of particles per cubic foot of | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (09 2016) |

| | | | |
|---|---|---|---|
| | | air | |
| Amorphous silica | TWA | 0.8 mg/m3 | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (09 2016) |
| | TWA | 20 millions of particles per cubic foot of air | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (09 2016) |
| Zirconium dioxide - as Zr | PEL | 5 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006) |
| Zirconium dioxide - Respirable fraction | TWA | 15 millions of particles per cubic foot of air | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016) |
| Zirconium dioxide - Total dust | TWA | 15 mg/m3 | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016) |
| Zirconium dioxide - Respirable fraction | TWA | 5 mg/m3 | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016) |
| Zirconium dioxide - Total dust | TWA | 50 millions of particles per cubic foot of air | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016) |
| Zirconium dioxide - Respirable particles | TWA | 3 mg/m3 | US. ACGIH Threshold Limit Values, as amended (01 2021) |
| Zirconium dioxide - Inhalable particles | TWA | 10 mg/m3 | US. ACGIH Threshold Limit Values, as amended (01 2021) |
| Zirconium dioxide - as Zr | STEL | 10 mg/m3 | US. ACGIH Threshold Limit Values, as amended (01 2025) |
| | TWA | 5 mg/m3 | US. ACGIH Threshold Limit Values, as amended (01 2025) |

| Chemical name | Type | Exposure Limit Values | Source |
|---|---|---|---|
| Diisodecyl phthalate | TWA | 5 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010) |
| Titanium dioxide - Total dust | TWA | 10 mg/m3 | Canada. British Columbia OELs: Table of Exposure Limits for Chemical Biological Substances (Workers Compensation Board); as amended (07 2007) |
| Titanium dioxide - Respirable fraction | TWA | 3 mg/m3 | Canada. British Columbia OELs: Table of Exposure Limits for Chemical Biological Substances (Workers Compensation Board); as amended (07 2007) |
| Titanium dioxide | TWA | 10 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010) |
| Titanium dioxide - Total dust | TWA | 10 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017) |
| Carbon Black - Inhalable | TWA | 3 mg/m3 | Canada. British Columbia OELs: Table of Exposure Limits for Chemical Biological Substances (Workers Compensation Board); as amended (09 2011) |
| Carbon Black - Inhalable fraction | TWA | 3 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (06 2015) |
| Carbon Black - Inhalable dust | TWA | 3 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (03 2020) |
| Iron oxide - Respirable fraction | TWA | 5 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (01 2020) |
| Iron oxide - Dust - as Fe | TWA | 5 mg/m3 | Canada. British Columbia OELs: Table of Exposure Limits for Chemical Biological Substances (Workers Compensation Board); as amended (07 2007) |
| Iron oxide - Fume - as Fe | STEL | 10 mg/m3 | Canada. British Columbia OELs: Table of Exposure Limits for Chemical Biological Substances (Workers Compensation Board); as amended (07 2007) |
|  | TWA | 5 mg/m3 | Canada. British Columbia OELs: Table of Exposure Limits for Chemical Biological Substances (Workers Compensation Board); as amended (07 2007) |

| | | | |
|---|---|---|---|
| Iron oxide - Dust and fume - as Fe | TWA | 5 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017) |
| Aluminum oxide - Respirable fraction | TWA | 1 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010) |
| Aluminum oxide - Total dust | TWA | 10 mg/m3 | Canada. British Columbia OELs: Table of Exposure Limits for Chemical Biological Substances (Workers Compensation Board); as amended (06 2020) |
| Aluminum oxide - Inhalable particles | TWA | 10 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (01 2020) |
| Aluminum oxide - Respirable particles | TWA | 3 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (01 2020) |
| Aluminum oxide - Respirable fraction | TWA | 3 mg/m3 | Canada. British Columbia OELs: Table of Exposure Limits for Chemical Biological Substances (Workers Compensation Board); as amended (06 2020) |
| Aluminum oxide - Respirable | TWA | 1.0 mg/m3 | Canada. British Columbia OELs: Table of Exposure Limits for Chemical Biological Substances (Workers Compensation Board); as amended (06 2022) |
| Aluminum oxide - Total dust | TWA | 10 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (04 2022) |
| Aluminum oxide - Respirable dust | TWA | 5 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (04 2022) |
| Aluminum oxide - Inhalable fraction | TWA | 10 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (01 2020) |
| Aluminum oxide - Respirable fraction | TWA | 3 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (01 2020) |

**Appropriate Engineering Controls** Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.

**Individual protection measures, such as personal protective equipment (PPE)**

**Eye/face protection:** Wear safety glasses with side shields (or goggles).

**Skin Protection**

**Hand Protection:** Additional Information: Use suitable protective gloves if risk of skin contact.

**Skin and Body Protection:** Wear suitable protective clothing.

**Respiratory Protection:** In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.

**Hygiene measures:** Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product.

## 9. Physical and chemical properties

**Information on basic physical and chemical properties**

**Appearance**

| | |
|---|---|
| **Physical state:** | liquid |
| **Form:** | Paste |
| **Color:** | Light brown |
| **Odor:** | Mild |
| **Odor Threshold:** | No data available. |
| **Freezing point:** | No data available. |
| **Boiling Point:** | No data available. |
| **Flammability:** | No |

**Upper/lower limit on flammability or explosive limits**

| | |
|---|---|
| **Explosive limit - upper:** | No data available. |
| **Explosive limit - lower:** | No data available. |
| **Flash Point:** | No data available. |
| **Auto-ignition temperature:** | No data available. |
| **Decomposition Temperature:** | No data available. |
| **pH:** | No data available. |

**Viscosity**

| | |
|---|---|
| **Dynamic viscosity:** | No data available. |
| **Kinematic viscosity:** | No data available. |
| **Flow Time:** | No data available. |

**Solubility(ies)**

| | |
|---|---|
| **Solubility in Water:** | Practically Insoluble |
| **Solubility (other):** | No data available. |
| **Partition coefficient (n-octanol/water):** | No data available. |
| **Vapor pressure:** | No data available. |
| **Relative density:** | 1.48 |
| **Density:** | No data available. |
| **Bulk density:** | No data available. |
| **Relative vapor density:** | Vapors are heavier than air and may travel along the floor and in the bottom of containers. |
| **Particle characteristics:** | Not applicable. |

**Other information**

| | |
|---|---|
| **Evaporation Rate:** | Slower than Ether |

## 10. Stability and reactivity

**Reactivity:** No data available.

| | |
|---|---|
| **Chemical Stability:** | Material is stable under normal conditions. |
| **Possibility of hazardous reactions:** | No data available. |
| **Conditions to avoid:** | Avoid heat or contamination. |
| **Incompatible Materials:** | Avoid contact with oxidizing agents (e.g. nitric acid, peroxides and chromates). |
| **Hazardous Decomposition Products:** | Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors. |

## 11. Toxicological information

**Information on likely routes of exposure**

| | |
|---|---|
| **Inhalation:** | In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes. |
| **Skin Contact:** | May be harmful in contact with skin. |
| **Eye contact:** | Eye contact is possible and should be avoided. |
| **Ingestion:** | May be ingested by accident. Ingestion may cause irritation and malaise. |

**Symptoms related to the physical, chemical and toxicological characteristics**

| | |
|---|---|
| **Inhalation:** | No data available. |
| **Skin Contact:** | No data available. |
| **Eye contact:** | No data available. |
| **Ingestion:** | No data available. |

**Information on toxicological effects**

**Acute toxicity (list all possible routes of exposure)**

**Oral**

| | |
|---|---|
| **Product:** | Not classified for acute toxicity based on available data. |

**Specified substance(s):**

| | |
|---|---|
| Titanium dioxide | LD 50 (Rat): > 5,000 mg/kg |
| Carbon Black | LD 50 (Rat): > 10,000 mg/kg |
| Iron oxide | LD 50 (Rat): > 5,000 mg/kg |
| Aluminum oxide | LD 50 (Rat): > 15,900 mg/kg |
| Amorphous silica | LD 50 (Mouse): > 5,000 mg/kg |
| Zirconium dioxide | LD 50 (Rat): > 5,000 mg/kg |

**Dermal**
**Product:** ATEmix: 3,256.17 mg/kg

**Inhalation**
**Product:** Not classified for acute toxicity based on available data.

**Specified substance(s):**

| | |
|---|---|
| Titanium dioxide | LC 50 (Rat): 3.43 mg/l |

**Repeated dose toxicity**
**Product:** No data available.

**Skin Corrosion/Irritation**
**Product:** No data available.

**Specified substance(s):**

| | |
|---|---|
| Titanium dioxide | in vivo (Rabbit): Not Classified , 24 h |
| Carbon Black | in vivo (Rabbit): Not Classified , 24 - 72 h |
| Iron oxide | in vivo (Rabbit): Not irritating , 24 - 72 h |
| Aluminum oxide | in vivo (Rabbit): Not irritating , 24 - 72 h |
| Amorphous silica | in vivo (Rabbit): Not Classified , 72 h |

**Serious Eye Damage/Eye Irritation**
**Product:** No data available.
**Specified substance(s):**

| | |
|---|---|
| Aluminum oxide | Rabbit, 24 - 72 h: Not irritating |
| Zirconium dioxide | Rabbit, 24 h: Not irritating |

**Respiratory or Skin Sensitization**
**Product:** No data available.

**Carcinogenicity**
**Product:** Suspected of causing cancer.

**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

| | |
|---|---|
| Titanium dioxide | Overall evaluation: Possibly carcinogenic to humans. |
| Carbon Black | Overall evaluation: Possibly carcinogenic to humans. |

**US. National Toxicology Program (NTP) Report on Carcinogens:**
No carcinogenic components identified

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053), as amended:**
No carcinogenic components identified

**Germ Cell Mutagenicity**

**In vitro**
**Product:** No data available.

**In vivo**
**Product:** No data available.

**Reproductive toxicity**
**Product:** No data available.

**Specific Target Organ Toxicity - Single Exposure**
**Product:** No data available.

**Specific Target Organ Toxicity - Repeated Exposure**
**Product:** No data available.

**Aspiration Hazard**
**Product:** No data available.

**Other effects:** No data available.

## 12. Ecological information

**Ecotoxicity:**

**Acute hazards to the aquatic environment:**

**Fish**

| | |
|---|---|
| **Product:** | No data available. |
| **Specified substance(s):** | |
| Aluminum oxide | LC 50 (Oncorhynchus mykiss, 96 h): 0.61 mg/l |

**Aquatic Invertebrates**

| | |
|---|---|
| **Product:** | No data available. |
| **Specified substance(s):** | |
| Aluminum oxide | EC 50 (Ceriodaphnia dubia, 48 h): 1.5 mg/l Experimental result, Weight of evidence |

**Chronic hazards to the aquatic environment:**

**Fish**

| | |
|---|---|
| **Product:** | No data available. |
| **Specified substance(s):** | |
| Aluminum oxide | NOEL (Danio rerio): 548.3 µg/l experimental result |
| Amorphous silica | NOEL (Fish): 57.001 mg/l QSAR |

**Aquatic Invertebrates**

| | |
|---|---|
| **Product:** | No data available. |
| **Specified substance(s):** | |
| Titanium dioxide | NOEC (Daphnia magna): 0.5 mg/l estimated by calculation Estimated by calculation, Disregarded study |
| Iron oxide | NOEC (Daphnia magna): >= 20 mg/l experimental result Experimental result, Key study |
| Aluminum oxide | NOEC (Daphnia magna): 137 µg/l experimental result Experimental result, Weight of evidence |
| Amorphous silica | NOEC (Daphnia magna): 68 mg/l experimental result Experimental result, Key study |

**Toxicity to Aquatic Plants**

| | |
|---|---|
| **Product:** | No data available. |

**Persistence and Degradability**

**Biodegradation**

| | |
|---|---|
| **Product:** | No data available. |
| **Specified substance(s):** | |

| | |
|---|---|
| Carbon Black | 11 % (28 d) Detected in water. Experimental result, Key study |

**BOD/COD Ratio**
**Product:** No data available.

**Bioaccumulative potential**
**Bioconcentration Factor (BCF)**
**Product:** No data available.

**Partition Coefficient n-octanol / water (log Kow)**
**Product:** No data available.

**Mobility in soil:** No data available.

**Other adverse effects:** Very toxic to aquatic organisms.

## 13. Disposal considerations

**Disposal methods:** Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Contaminated Packaging:** No data available.

## 14. Transport information

**TDG:**

Not Regulated

**CFR / DOT:**

Not Regulated

**IMDG:**

Not Regulated

## 15. Regulatory information

**US Federal Regulations**
**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**
None present or none present in regulated quantities.

**US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721 and 725, Subpt E)**

None present or none present in regulated quantities.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053), as amended**
None present or none present in regulated quantities.

**CERCLA Hazardous Substance List (40 CFR 302.4):**

| Chemical Identity | Reportable quantity |
|---|---|

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**
Delayed (Chronic) Health Hazard

**US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances**

**US. EPCRA (SARA Title III) Section 313 Toxic Chemical Release Inventory (TRI) Reporting**

| Chemical Identity | % by weight |
|---|---|
| Aluminum oxide | 1.0% |

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**
None present or none present in regulated quantities.

**Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)**
None present or none present in regulated quantities.

**US State Regulations**

**US. California Proposition 65**
For more information go to www.P65Warnings.ca.gov.

**International regulations**

**Montreal protocol**
Not applicable

**Stockholm convention**
Not applicable

**Rotterdam convention**
Not applicable

**Kyoto protocol**
Not applicable

**VOC:**

| | | |
|---|---|---|
| Regulatory VOC (less water and exempt solvent) | : | 0 g/l |
| VOC Method 310 | : | 0.00 % |

**Inventory Status:**

| | |
|---|---|
| Australia AICS: | One or more components in this product are not listed on or exempt from the Inventory. |
| Canada DSL Inventory List: | All components in this product are listed on or exempt from the Inventory. |
| EC Inventory: | One or more components in this product are not listed on or exempt from the Inventory. |
| Japan (ENCS) List: | One or more components in this product are not listed on or exempt from the Inventory. |
| China Inv. Existing Chemical Substances: | One or more components in this product are not listed on or exempt from the Inventory. |
| Korea Existing Chemicals Inv. (KECI): | One or more components in this product are not listed on or exempt from the Inventory. |
| Canada NDSL Inventory: | One or more components in this product are not listed on or exempt from the Inventory. |
| Philippines PICCS: | One or more components in this product are not listed on or exempt from the Inventory. |
| US TSCA Inventory: | All components in this product are listed on or exempt from the Inventory. |
| New Zealand Inventory of Chemicals: | One or more components in this product are not listed on or exempt from the Inventory. |
| Japan ISHL Listing: | One or more components in this product are not listed on or exempt from the Inventory. |
| Japan Pharmacopoeia Listing: | One or more components in this product are not listed on or exempt from the Inventory. |

## 16.Other information, including date of preparation or last revision

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|---|---|
| **Revision Date:** | 05/11/2026 |
| **Version #:** | 1.1 |
| **Further Information:** | No data available. |
| **Disclaimer:** | For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition. |