SAFETY DATA SHEET

1. Identification

Material name: METAL FX - 1 GAL DOSAGE PEARL
Material: CMFX G001 542

Recommended use and restriction on use
   Recommended use: Pigment
   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
   Acute toxicity (Inhalation - dust and mist) Category 4
   Carcinogenicity Category 2

Unknown toxicity - Health
   Acute toxicity, oral 57 %
   Acute toxicity, dermal 100 %
   Acute toxicity, inhalation, vapor 100 %
   Acute toxicity, inhalation, dust or mist 99 %

Label Elements

Hazard Symbol:

Signal Word: Warning
Hazard Statement: Harmful if inhaled. Suspected of causing cancer.

Precautionary Statements

Prevention: Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.

Response: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

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

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>CAS number</th>
<th>Content in percent (%)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mica</td>
<td>12001-26-2</td>
<td>50 - &lt;100%</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>20 - &lt;50%</td>
</tr>
<tr>
<td>Tin oxide</td>
<td>18282-10-5</td>
<td>1 - &lt;5%</td>
</tr>
</tbody>
</table>

* 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: Remove contaminated clothing and wash the skin thoroughly with soap and water after work.

Eye contact: Rinse immediately with plenty of water.

Ingestion: Rinse mouth thoroughly.

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 firefighters

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: Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

Environmental Precautions: Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water sources or sewer. Environmental manager must be informed of all major spillages.

7. Handling and storage

Handling

Technical measures (e.g. Local and general ventilation): Mechanical ventilation or local exhaust ventilation may be required. Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of dust.
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. Ventilate well, avoid breathing vapors. Use approved respirator if air contamination is above accepted level. Use mechanical ventilation in case of handling which causes formation of dust.

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

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Type</th>
<th>Exposure Limit Values</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mica - Respirable fraction.</td>
<td>TWA</td>
<td>3 mg/m³</td>
<td>US. ACGIH Threshold Limit Values (2011)</td>
</tr>
<tr>
<td>Mica</td>
<td>TWA</td>
<td>20 millions of particles per cubic foot of air</td>
<td>US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>US. ACGIH Threshold Limit Values (2011)</td>
</tr>
<tr>
<td>Titanium dioxide - Total dust.</td>
<td>PEL</td>
<td>15 mg/m³</td>
<td>US. OSHA Table Z-3 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)</td>
</tr>
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<td>TWA</td>
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<td>TWA</td>
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<td>Titanium dioxide - Respirable fraction.</td>
<td>TWA</td>
<td>2 mg/m³</td>
<td>US. OSHA Table Z-3 (29 CFR 1910.1000) (04 2016)</td>
</tr>
<tr>
<td>Titanium dioxide - Total dust.</td>
<td>TWA</td>
<td>50 millions of particles per cubic foot of air</td>
<td>US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)</td>
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<tr>
<td>Tin oxide - as Sn</td>
<td>TWA</td>
<td>2 mg/m³</td>
<td>US. ACGIH Threshold Limit Values (2011)</td>
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### Appropriate Engineering Controls

Mechanical ventilation or local exhaust ventilation may be required. Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of dust.

### Individual protection measures, such as personal protective equipment

#### General information:
Use personal protective equipment as required.

#### Eye/face protection:
Wear goggles/face shield.

#### Skin Protection

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

**Other:** No data available.

#### 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
Appearance

- Physical state: solid
- Form: Powder
- Color: Off-white

Odor:
- Odor: Odorless
- Odor threshold: No data available.

pH:
- pH: No data available.

Melting point/freezing point:
- No data available.

Initial boiling point and boiling range:
- No data available.

Flash Point:
- No data available.

Evaporation rate:
- No data available.

Flammability (solid, gas):
- No

Upper/lower limit on flammability or explosive limits

- Flammability limit - upper (%): No data available.
- Flammability limit - lower (%): No data available.
- Explosive limit - upper (%): No data available.
- Explosive limit - lower (%): No data available.

Vapor pressure:
- No data available.

Vapor density:
- No data available.

Relative density:
- 3.1

Solubility(ies)

- Solubility in water: Miscible with water.
- Solubility (other): No data available.

Partition coefficient (n-octanol/water):
- No data available.

Auto-ignition temperature:
- No data available.

Decomposition temperature:
- No data available.

Viscosity:
- No data available.

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:
- No data available.

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: Moderately irritating to skin with prolonged exposure.

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

Dermal
Product:

Inhalation
Product: ATEmix: 2.04 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 irritant

In vitro (Human, EPISKIN epidermis model): Not irritant

Serious Eye Damage/Eye Irritation
Product: No data available.

Specified substance(s):
Titanium dioxide  
Rabbit, 24 hrs: 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.

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

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):**  
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.

Aquatic Invertebrates
Product: No data available.

Specified substance(s):
Titanium dioxide
EC 50 (Water flea (Daphnia magna), 48 h): > 1,000 mg/l Intoxication

Chronic hazards to the aquatic environment:

Fish
Product: No data available.

Aquatic Invertebrates
Product: No data available.

Toxicity to Aquatic Plants
Product: No data available.

Persistence and Degradability

Biodegradation
Product: No data available.

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: No data available.
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, Subpt E)
None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):
None present or none present in regulated quantities.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate (Acute) Health Hazards
Delayed (Chronic) Health Hazard
Acute toxicity (any route or exposure)
Carcinogenicity

SARA 302 Extremely Hazardous Substance
None present or none present in regulated quantities.
SARA 304 Emergency Release Notification
None present or none present in regulated quantities.

SARA 311/312 Hazardous Chemical

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Threshold Planning Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mica</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>Tin oxide</td>
<td>10000 lbs</td>
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</table>

SARA 313 (TRI Reporting)
None present or none present in regulated quantities.

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
WARNING
Cancer - www.P65Warnings.ca.gov

US. New Jersey Worker and Community Right-to-Know Act

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US. Massachusetts RTK - Substance List

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<td>Mica</td>
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US. Pennsylvania RTK - Hazardous Substances

<table>
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</thead>
<tbody>
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US. Rhode Island RTK

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<tbody>
<tr>
<td>Mica</td>
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<td>Titanium dioxide</td>
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</tbody>
</table>

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: All components in this product are listed on or exempt from the Inventory.
Canada DSL Inventory List: All components in this product are listed on or exempt from the Inventory.
EINECS, ELINCS or NLP: 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: All components in this product are listed on or exempt from the Inventory.
Korea Existing Chemicals Inv. (KECI): All components in this product are 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: All components in this product are listed on or exempt from the Inventory.
US TSCA Inventory: One or more components in this product are not listed on or exempt from the Inventory.
New Zealand Inventory of Chemicals: All components in this product are 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

Revision Date: 08/20/2019
Version #: 2.0
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.