1. Product and Company Identification

Use: Colorants for art and industrial use

Company
Aardvark Colors
245 Kent Ave.
Brooklyn, NY 11249, USA

24 Hour Emergency Response Information
CHEMTREC: 1-800-424-9300

2. Hazards Identification

Emergency overview

WARNING:
May cause cancer by inhalation.
Contains a suspect carcinogen.
Prolonged or repeated exposure may cause pulmonary problems.

State of matter: solid
Colour: greyish
Odour: odourless

Potential health effects

Primary routes of exposure:
Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquified gases.

Irritation / corrosion:
Inhalation of dust may cause respiratory tract irritation, coughing and breathing difficulties. Contact with the eyes or skin may cause mechanical irritation.

Chronic toxicity:

Repeated dose toxicity: Prolonged or repeated exposure may cause pulmonary problems. The product has not been tested. The statement has been derived from the properties of the individual components.

Signs and symptoms of overexposure:
No significant reaction of the human body to the product known.

Potential environmental effects

Aquatic toxicity:
At the present state of knowledge, no negative ecological effects are expected.

3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Content (W/W)</th>
<th>Chemical name</th>
</tr>
</thead>
<tbody>
<tr>
<td>12001-26-2</td>
<td>53.0 - 68.0 %</td>
<td>Mica-group minerals</td>
</tr>
<tr>
<td>13463-67-7</td>
<td>16.0 - 23.0 %</td>
<td>Titanium dioxide</td>
</tr>
<tr>
<td>1317-61-9</td>
<td>16.0 - 24.0 %</td>
<td>Iron oxide (Fe3O4)</td>
</tr>
<tr>
<td>1309-37-1</td>
<td>&lt; 2.0 %</td>
<td>Iron oxide</td>
</tr>
</tbody>
</table>

4. First-Aid Measures

**General advice:**
Remove contaminated clothing.

**If inhaled:**
If difficulties occur after dust has been inhaled, remove to fresh air and seek medical attention.

**If on skin:**
Wash thoroughly with soap and water. If irritation develops, seek medical attention.

**If in eyes:**
Wash affected eyes for at least 15 minutes under running water with eyelids held open. If irritation develops, seek immediate medical attention.

**If swallowed:**
Rinse mouth and then drink plenty of water. Do not induce vomiting. Seek medical attention if necessary.

**Note to physician**
Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

**Flash point:** not applicable
**Autoignition:** not applicable
**Flammability:** does not ignite

**Suitable extinguishing media:**
dry powder, foam

**Unsuitable extinguishing media for safety reasons:**
carbon dioxide

**Hazards during fire-fighting:**
No particular hazards known.

**Protective equipment for fire-fighting:**
Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

**Further information:**
Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.
6. Accidental release measures

**Personal precautions:**
Avoid dust formation. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment.

**Environmental precautions:**
Do not empty into drains.

This product is not regulated by RCRA. This product is not regulated by CERCLA ('Superfund').

**Cleanup:**
For small amounts: Pick up with suitable appliance and dispose of.
For large amounts: Pick up with suitable appliance and dispose of.

Spills should be contained and placed in suitable containers for disposal.

7. Handling and Storage

**Handling**

**General advice:**
Breathing must be protected when large quantities are decanted without local exhaust ventilation. Avoid contact with the skin, eyes and clothing.

Avoid dust formation. Closed containers should only be opened in well-ventilated areas.

**Protection against fire and explosion:**
No special precautions necessary.

See MSDS section 5 - Fire fighting measures. Prevent electrostatic charge accumulation.

**Storage**

**General advice:**
Keep in a cool place. Keep container dry.

8. Exposure Controls and Personal Protection

**Components with workplace control parameters**

<table>
<thead>
<tr>
<th>Component</th>
<th>OSHA</th>
<th>ACGIH</th>
<th>PEL</th>
<th>TWA Value</th>
<th>10 mg/m³</th>
<th>fumes/smoke</th>
<th>5 mg/m³</th>
<th>Respirable fraction</th>
<th>15 mg/m³</th>
<th>Total dust</th>
<th>10 mg/m³</th>
<th>Total dust</th>
<th>20 millions of particles per cubic foot of air</th>
<th>3 mg/m³</th>
<th>Respirable fraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron oxide</td>
<td>OSHA</td>
<td></td>
<td>PEL</td>
<td>TWA value</td>
<td>10 mg/m³</td>
<td>fumes/smoke</td>
<td>5 mg/m³</td>
<td>Respirable fraction</td>
<td>15 mg/m³</td>
<td>Total dust</td>
<td>10 mg/m³</td>
<td>Total dust</td>
<td>20 millions of particles per cubic foot of air</td>
<td>3 mg/m³</td>
<td>Respirable fraction</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>OSHA</td>
<td></td>
<td>PEL</td>
<td>TWA value</td>
<td>10 mg/m³</td>
<td>fumes/smoke</td>
<td>5 mg/m³</td>
<td>Respirable fraction</td>
<td>15 mg/m³</td>
<td>Total dust</td>
<td>10 mg/m³</td>
<td>Total dust</td>
<td>20 millions of particles per cubic foot of air</td>
<td>3 mg/m³</td>
<td>Respirable fraction</td>
</tr>
<tr>
<td>Mica-group minerals</td>
<td>OSHA</td>
<td></td>
<td>PEL</td>
<td>TWA value</td>
<td>10 mg/m³</td>
<td>fumes/smoke</td>
<td>5 mg/m³</td>
<td>Respirable fraction</td>
<td>15 mg/m³</td>
<td>Total dust</td>
<td>10 mg/m³</td>
<td>Total dust</td>
<td>20 millions of particles per cubic foot of air</td>
<td>3 mg/m³</td>
<td>Respirable fraction</td>
</tr>
</tbody>
</table>

**Personal protective equipment**

**Respiratory protection:**
Observe OSHA regulations for respirator use (29 CFR 1910.134). Wear a NIOSH-certified (or equivalent) particulate respirator.

---

If exposed to fire, keep containers cool by spraying with water.
Hand protection: Chemical resistant protective gloves

Eye protection: Safety glasses with side-shields.

General safety and hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Due to the colouring properties of the product closed work clothes should be used, to avoid stains during manipulation. Hands and/or face should be washed before breaks and at the end of the shift. Wash soiled clothing immediately.

9. Physical and Chemical Properties

Form: powder
Odour: odourless
Colour: greyish
pH value: 6.0 - 10.5
Melting point: The substance / product decomposes.
Density: 3.1 g/cm³ (approx. 20 °C)
Relative density: 3.1
Bulk density: 155 kg/m³
Vapour density: not applicable
Particle size: D95 4 - 90 µm
Solubility in water: insoluble

10. Stability and Reactivity

Hazardous reactions: No hazardous reactions when stored and handled according to instructions. The product is chemically stable. Hazardous polymerization will not occur.

Decomposition products: Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

11. Toxicological information

Acute toxicity

Oral: Type of value: LD50
Species: rat
Value: > 2,000 mg/kg
The product has not been tested. The statement has been derived from the properties of the individual components.

Irritation / corrosion

Skin: May cause mechanical irritation.

Eye: May cause mechanical irritation.

Carcinogenicity
Information on: Titanium dioxide
IARC (International Agency for Research on Cancer) has classified this substance as group 2B (The agent is possibly carcinogenic to humans). In long-term studies in rats in which the substance was given by inhalation, a carcinogenic effect was observed. Tumors were only observed in rats after chronic inhalative exposure to high concentrations which caused sustained lung inflammation. In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed. Dermal exposure is not expected to be carcinogenic.

Aspiration Hazard:
not applicable

12. Ecological Information

Fish
Acute:
Fish/LC50 (96 h):
not determined

Chronic:
No data available.

Aquatic invertebrates
Acute:
daphnia/LC50 (48 h):
not determined

Chronic:
No data available.

Aquatic plants
Toxicity to aquatic plants:
algae/EC50 (72 h):
not determined

Microorganisms
Toxicity to microorganisms:
bacteria/EC50 (0.5 h):
not determined

Degradability / Persistence
Biological / Abiological Degradation
Evaluation: The colourant is insoluble in water and can thus be separated from water mechanically in suitable effluent treatment plant

Other adverse effects:
The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations. The product has not been tested. The statement has been derived from the properties of the individual components.
13. Disposal considerations

Waste disposal of substance:
Dispose of in a licensed facility. Do not discharge into drains/surface waters/groundwater. It is the waste generator's responsibility to determine if a particular waste is hazardous under RCRA.

Container disposal:
Uncontaminated packaging can be re-used. Packs that cannot be cleaned should be disposed of in the same manner as the contents.

14. Transport Information

Land transport
USDOT
Not classified as a dangerous good under transport regulations

Sea transport
IMDG
Not classified as a dangerous good under transport regulations

Air transport
IATA/ICAO
Not classified as a dangerous good under transport regulations

15. Regulatory Information

Federal Regulations

Registration status:
Chemical TSCA, US released / listed

OSHA hazard category: IARC 1, 2A or 2B carcinogen; Chronic target organ effects reported; OSHA PEL established; ACGIH TLV established

EPCRA 311/312 (Hazard categories): Acute; Chronic

State regulations

State RTK CAS Number Chemical name
MA, NJ, PA 12001-26-2 Mica-group minerals
MA, NJ, PA 13463-67-7 Titanium dioxide
MA, NJ, PA 1309-37-1 Iron oxide

CA Prop. 65:
THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.
16. Other Information

HMIS III rating

Health: 1a  Flammability: 0  Physical hazard: 0

NFPA and HMIS use a numbering scale ranging from 0 to 4 to indicate the degree of hazard. A value of zero means that the substance possesses essentially no hazard; a rating of four indicates extreme danger. Although similar, the two rating systems are intended for different purposes, and use different criteria. The NFPA system was developed to provide an on-the-spot alert to the hazards of a material, and their severity, to emergency responders. The HMIS system was designed to communicate workplace hazard information to employees who handle hazardous chemicals.

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

IMPORTANT: WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE, IT IS PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION/USE, WE RECOMMEND THAT YOU MAKE TESTS TO DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, YOU EXPRESSLY UNDERSTAND AND AGREE THAT THE DESCRIPTIONS, DESIGNS, DATA, AND INFORMATION FURNISHED BY BASF HEREUNDER ARE GIVEN GRATIS AND BASF ASSUMES NO OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DESIGNS, DATA AND INFORMATION GIVEN OR RESULTS OBTAINED, ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK.

END OF DATA SHEET