Safety Data Sheet Luminous Silver – Luster Pigment

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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:

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

3. Composition / Information on Ingredients

CAS Number	Content (W/W)	Chemical name
12001-26-2	53.0 - 68.0 %	Mica-group minerals
13463-67-7	16.0 - 23.0 %	Titanium dioxide
1317-61-9	16.0 - 24.0 %	Iron oxide (Fe3O4)
1309-37-1	< 2.0 %	Iron oxide

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.

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If exposed to fire, keep containers cool by spraying with water.

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

Iron oxide	OSHA	PEL 10 mg/m3 fumes/smoke ;
	ACGIH	TWA value 5 mg/m3 Respirable fraction ;
Titanium dioxide	OSHA	PEL 15 mg/m3 Total dust ;
	ACGIH	TWA value 10 mg/m3 ;
Mica-group minerals	OSHA	TWA value 20 millions of particles per cubic foot of air ;
	ACGIH	TWA value 3 mg/m3 Respirable fraction ;

Personal protective equipment

Respiratory protection:

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

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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. (approx. 20 °C)

Density: 3.1 g/cm3 Relative density: 3.1

Bulk density: 155 kg/m3

Vapour density:

not applicable

D95 4 - 90 µm Particle size:

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

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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.

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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.

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16. Other Information

HMIS III rating

Health: 1^m 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.

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