NATURAL DYE MATERIAL SAFETY DATA SHEET

SECTION 1--COMPANY IDENTITY

Dharma Trading Company 1805 South McDowell Blvd. Ext. Petaluma, CA 94954 USA (800) 542-5227

SECTION 2--CHEMICAL PRODUCT AND COMPOSITION/INFORMATION ON INGREDIENTS

NON-FOOD ITEM

Trade/Common Names

Aluminum triformate % CAS No.

ALUMINUM TRIFORMATE 100 7360-53-4

SECTION 3--HAZARDS IDENTIFICATION

No toxic effects known from dust inhalation or ingestion. Inhalation may cause coughing and sneezing. Avoid breathing dust from powders. **Avoid contact with eyes**. Contact with skin will cause temporary discoloration. Wash thoroughly after handling.



NFPA Rating: HMIS Rating:

Health 2 (Slight) Health 2 (Slight) Flammability 0 (Insignificant) Flammability 0

(Insignificant) Reactivity 0 (Insignificant) Reactivity 0 (Insignificant)

SECTION 4--FIRST AID MEASURES

Inhalation: Remove person to fresh air. If breathing difficulty occurs, or coughing persists, get prompt medical attention.

Skin/Eye Contact: Flush eyes with plenty of clean water for at least 15 minutes. If irritation persists, get medical attention. Wash skin thoroughly with soap and warm water to remove temporary staining and use emollients if needed.

Ingestion (of quantity): If person is conscious, give water, induce vomiting. Get medical attention.

SECTION 5--FIRE FIGHTING MEASURES

Flash Point: N/A Flammable Limits: N/A

Extinguishing Media: Use dry chemical, carbon dioxide or alcohol-resistant foam.

Procedures & Equipment: Wear SCBA

Hazardous Incomplete Combustion Products: Unknown

Unusual Fire & Explosion Hazards: May form explosive mixture like all organic dust

SECTION 6--ACCIDENTAL RELEASE MEASURES

Steps to be taken if material is spilled: Sweep and pick up for disposal. On Highway: Sweep and pick up for disposal. Disposal Methods: Per Federal and State regulation.

SECTION 7--HANDLING AND STORAGE

PROCEDURE FOR HANDLING

- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- DO NOT allow material to contact humans, exposed food or food utensils.
- Avoid contact with incompatible materials.

- When handling, DO NOT eat, drink or smoke.
- Keep containers securely sealed when not in use.
- Avoid physical damage to containers.
- Always wash hands with soap and water after handling.
- Work clothes should be laundered separately.
- Launder contaminated clothing before re-use.
- Use good occupational work practice.
- Observe manufacturer's storing and handling recommendations.
- Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignition source.
- Do NOT cut, drill, grind or weld such containers
- In addition ensure such activity is not performed near full, partially empty or empty containers without appropriate workplace safety authorisation or permit.

RECOMMENDED STORAGE METHODS

- Polyethylene or polypropylene container.
- Check all containers are clearly labelled and free from leaks.

STORAGE REQUIREMENTS

- Store in original containers.
- Keep containers securely sealed.
- Store in a cool, dry, well-ventilated area.
- Store away from incompatible materials and foodstuff containers.
- Protect containers against physical damage and check regularly for leaks.
- Observe manufacturer's storing and handling recommendations.

SECTION 8--EXPOSURE CONTROL/PERSONAL PROTECTION

Engineering Measures:Local, mechanical exhaust recommended.

Respiratory Protection: Dust respirator when handling, sifting, measuring, or dissolving powder. Eye Protection: Wear tightly fitting safety goggles with side-shields conforming to EN 166(EU) or NIOSH (US).

Protective Clothing: Appropriate clean clothing to prevent skin contact. Personal Hygiene: Wash hands after exposure.

SECTION 9--PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: > 410 ŰC. Remarks:"Aluminium triformate" decomposed. The decomposed test substance did not melt until 410 ŰC. Decomposition was indicated by gas development starting at about 325 ŰC. Vapor Pressure: N/A

Flash Point: 29.9 A °C Vapor Density: N/A Melting Point: N/A Specific Gravity: 1.0

ANKS SINCE 1969 Solubility: In water: 86.1 g/L. Temperature: 20 °C. pH:3.7.;103.4 g/L. Temperature: 30 °C. pH:3.7. Remarks:The temperature coefficient of the solubility of the test substance was.

pH: Acetic to litmus paper

Physical Appearance & Odor: White Powder & Acetic

SECTION 10--STABILITY AND REACTIVITY DATE

Stability: At ambient temperatures: Stable

At elevated temperatures: Stable to decomposition

Conditions to avoid: None

Hazardous polymerizations will NOT occur.

SECTION 11--TOXICOLOGICAL DATA

Classification (29CFR 1910.1200): Non hazardous, non regulated material

Toxicity and Sensitivity Data:

Ingestion Oral LD-50: Not Applicable Absorption Dermal: Not Applicable

Irritation: Not Applicable

Inhalation Rate: Not Applicable

Inhalation: LC50 - rat (male/female) - > 2.51 mg/L air.

Carcinogenicity: This material is not listed as a carcinogen by OSHA, NTP, IARC. Primary

Routes: Inhalation, eyes

Signs and Symptoms of Exposure (progressive):

- Inhalation: Sneezing, mucous flow, coughing
- Skin/eyes: Skin coloring, eyes irritation, tearing
- Ingestion: None
- Aqueous solution discolors skin, but no permanent adverse effects. No toxic effect known from dust inhalation or ingestion.

SECTION 12--ECOLOGICAL CONSIDERATIONS

Toxicity to fish: LC50 - Danio rerio (previous name: Brachydanio rerio) - > 0.06 mg/L - 96 h.

Toxicity to daphnia and other aquatic invertebrates: EC50 - Daphnia magna - 5 mg/L - 48 h.

Toxicity to algae: EC50 - Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum) - 2.75 mg/L - 72 h.

Toxicity to microorganisms: EC50 - activated sludge of a predominantly domestic sewage - > 300 mg/L - 3 h. Remarks:Respiration rate.

SECTION 13--DISPOSAL CONSIDERATIONS

Disposal Instructions

All waste must be handled in accordance with local, state and federal regulations. Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.

A Hierarchy of Controls seems to be common - the user should investigate:

- Reduction
- Reuse
- Recycling
- Disposal (if all else fails)

This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. Shelf life considerations should also be applied in making decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate.

DO NOT allow wash water from cleaning equipment to enter drains. Collect all wash water for treatment before disposal.

- Recycle wherever possible.
- Consult manufacturer for recycling options or consult Waste Management Authority for disposal if no suitable treatment or disposal facility can be identified.
- Dispose of by: Burial in a licensed land-fill or Incineration in a licensed apparatus (after admixture with suitable combustible material)
- Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.

SECTION 14--TRANSPORT CONSIDERATIONS

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS: DOT, IATA, IMDG

SECTION 15--REGULATORY INFORMATION

US TCSA Inventory: All components of this product are listed on the TSCA inventory.

SARA Section 313 This product contains the following SARA, Title III, Section 313 Chemicals: Acute

Other Regulations: Listed in the Canadian DSL and EINECS.

SECTION 16--OTHER INFORMATION

LIMITED EVIDENCE

• Cumulative effects may result following exposure*. * (limited evidence).

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 The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.