

MATERIAL SAFETY DATA SHEET

Section 1 – PRODUCT AND SAFETY SUPPLIER INFORMATION

Product Name: Lightning Fingerprint Powder- BiChromatic
Common Name: Latent Fingerprint Powder
Supplier: Educational Innovations, Inc.
5 Francis J. Clarke Circle, Bethel, CT 06801
Emergency Telephone: Chemtel® United States (800) 255-3924 International – 813-248-0585 (Collect)
Date Prepared: October 30, 2002

Section 2 – HAZARDOUS INGREDIENTS

| <u>Ingredient</u> | <u>CAS#</u> | <u>Percent</u> | <u>PEL (OSHA)</u> | <u>TLV (ACGIH)</u> |
|-------------------|-------------|----------------|-----------------------|-----------------------|
| Aluminum | 7429-90-5 | 9.5 | 15/mg/m ³ | 10 mg/m ³ |
| Carbon Black | 1333-86-4 | 10 | 3.5 mg.m ³ | 3.5 mg/m ³ |

Section 3 – PHYSICAL/CHEMICAL PROPERTIES

Appearance and Odor: Fine, black and silver powder with negligible odor.
Specific Gravity: 2.6 Stability in Water: Negligible solubility.
Boiling Point: n/a Melting Point: n/a
Vapor Density: n/a Vapor Pressure (mmHg): n/a
Evaporation Rate: n/a Percent Volatile: n/a

Section 4 – FIRE AND EXPLOSION DATA

Flash Point: n/a UEL: n/a LEL: 40 mg/l
Extinguishing Media: Dry sand, suffocation of flames
Firefighting Procedures: Do not use halogenated extinguishing methods. Ring small fire with sand, using non-sparking shovels, eliminate drafts, let fire extinguish itself.
Unusual Fire and Explosion Hazards: Aluminum flake powder is considered a flammable solid. It may be ignited by static discharge and burn at extremely high temperatures.

Section 5 – REACTIVITY DATA

Stability: Yes

Hazardous Polymerization: No

Incompatibilities: Aluminum powder oxidizes when heated at a temperature dependent rate, reacts violently with oxidizers to produce heat, reacts with water and slowly generates heat and hydrogen, and reacts with some acids and alkalis to form hydrogen gas.

Hazardous Decomposition Products: None

Section 6 – HEALTH HAZARD INFORMATION

Health Hazards: Acute- Dust concentrations above the permissible exposure limits may cause temporary respiratory tract discomfort and irritation of eyes. Chronic- Long term exposure to dust may cause irreversible lung damage.

Routes of Entry and First-Aid Procedures:

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the eyelids.

Inhalation: For inhalation discomfort, remove to fresh air.

Skin: Wash skin with water and mild soap or waterless hand cleaner.

Ingestion: Oral entry is not likely to produce adverse effects.

Signs and Symptoms of Exposure: Coughing or sneezing, runny or watery eyes.

Medical Conditions Aggravated by Exposure: Pre-existing upper respiratory and lung disorders, such as bronchitis, emphysema, and asthma.

Section 7 – EXPOSURE CONTROLS

Respirator Protection: NIOSH approved dust mask required when dust concentrations exceed TLV/PEL.

Ventilation: Sufficient to maintain below TLV.

Protective Gloves: Cotton or latex gloves for prolonged use. Eye Protection: Safety glasses or splash goggles for prolonged use.

Other Protective Equipment: Eye wash station for eye contact with material.

Work and Hygienic Practices: Employ good, industrial hygiene practices by using adequate ventilation and personal protection, as needed. Where dust cannot be controlled, personal respiratory should be employed.

Section 8 – SPILL OR LEAK PROCEDURES

Steps to be taken if material is spilled or released: Cleaning should be done with a soft brush or sponge, and pickup should be done with non-sparking, conductive scoops.

Plastic scoops should not be used because of their tendency to accumulate strong static charges.

Waste Disposal Method: In accordance with local, state, and federal regulations.

Section 9 – PRECAUTIONS FOR SAFE HANDLING AND USE

Special Precautions: Avoid dust cloud formations. Do not use vacuum cleaners to collect any spills. Use with adequate ventilation.

Storage Method: Keep containers closed when not in use.

Section 10 – TOXICOLOGICAL DATA

Carcinogenicity:

NPT: No

OSHA: No

IARC: No

Acute Inhalation LC50: Unavailable

Acute Dermal LD50: n/a

Acute Oral LD50: Unavailable.

Section 11 – ECOLOGICAL DATA

No information found.

Section 12 – TRANSPORTATION IDENTIFICATION

Proper Shipping Name: Aluminum Powder

Identification Number: UN1396 Hazard Class: 4.3

Packing Group: II, III