

V HEALTH HAZARD INFORMATION

Effects of Exposure: Acute:

Inhalation: Dust or powder may cause irritation to the upper respiratory tract.

Ingestion: No acute health effects recorded.

Skin: Dust or powder may cause irritation.

Eye: Dust or powder may cause abrasive irritation. Eye contact with aluminum particles may cause corneal necrosis.

Chronic Effects:

Inhalation: Inhalation of finely divided powder has been reported as a cause of pulmonary fibrosis. Aluminum in aerosols has been implicated in Alzheimer's disease.

Ingestion: No chronic health effects recorded.

Skin: No chronic health effects recorded.

Eyes: No chronic health effects recorded.

Medical Conditions Generally Aggravated by Exposure: Pre-existing upper respiratory and lung disorders.

Target Organs: No target organs recorded.

Carcinogenicity: NTP: No IARC Monographs: No OSHA Regulated: No EPA: No

EMERGENCY AND FIRST AID PROCEDURES:

INHALATION: Remove victim to fresh air; keep warm and quiet; give oxygen if breathing is difficult and seek medical attention if symptoms persist.

INGESTION: No data available but one should obtain medical attention.

SKIN: Remove contaminated clothing, flood skin with large amounts of water. If irritation persists seek medical attention.

EYE: Immediately flush eyes with lukewarm water, lifting upper and lower eyelids, for at least 15 minutes. Call a physician.

VI REACTIVITY DATA

Stability: Stable

Conditions to Avoid: Moisture and excessive heat.

Incompatibility (Material to Avoid): Oxidizing agents, halogens, water, air/hydrocarbon mixtures, aluminum halides + carbon monoxide or carbon dioxide, antimony, arsenic, bismuth, butanol, methanol and other alcohols, interhalogens, halocarbons, carbon disulfide, copper (I) oxide, copper (II) oxide, copper + sulfur, diborane, diethyl ether, disulfur dibromide, formic acid, hydrochloric acid, hydrofluoric acid, hydrogen chloride, iron + water, mercury (II) salts, metal oxosalts such as nitrates, oxides, and sulfates, niobium oxide + sulfur, non-metal halides, phosphorus, sulfur, selenium, steel and silicon steel, silver chloride, sodium acetylide, sodium diuranate, sodium hydroxide, zinc.

Hazardous Decomposition Products: Aluminum oxide; hydrogen when reacted with some acids and caustic solutions.

Hazardous Polymerization: Will not occur.

Other: Reacts with water slowly generating heat and explosive hydrogen gas.

VII SPILL OR LEAK PROCEDURES

Steps to Be Taken in Case Material Is Released or Spilled: When dealing with aluminum powder/dust wear appropriate respiratory and protective equipment specified in section VIII. Isolate spill area, provide ventilation and extinguish sources of ignition. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for proper disposal. Take care not to raise dust. Use non-sparking tools.

Waste Disposal Method: Dispose of in accordance with Local, State and Federal regulations.

VIII SPECIAL PROTECTION INFORMATION

Respiratory Protection: Use a high efficiency particle respirator if exposed to dust/powder.

Ventilation: Use local exhaust to maintain concentration at or below the PEL, TLV. Handle aluminum powder in a controlled environment.

Protective Gloves: Rubber or vinyl disposable gloves

Eye Protection: ANSI approved safety glasses

Other Protective Clothing or Equipment: Lab coat and apron, flame and chemical resistant coveralls, eyewash capable of sustained flushing, safety drench shower and hygienic facilities for washing.

IX SPECIAL PRECAUTIONS

Precautions to Be Taken in Handling and Storage: Keep container tightly closed. Store in a cool, dry, well-ventilated area. Wash thoroughly after use.

Other Precautions: Aluminum slowly generates hydrogen and heat on contact with water. Handle and store aluminum powder in a controlled environment and inert gas such as argon.

Work Practices: Implement engineering and work practice controls to reduce and maintain concentration of exposure at low levels. Use good housekeeping and sanitation practices. Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air.

RCRA Code: None

TSCA Registered: Yes

The above information is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. ESPI shall not be held liable for any damage resulting from handling or from contact with the above product.

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