

Material Safety Data Sheet



Aluminum, Powder

Revised: 12/08/2011
Replaces: 12/08/2011
Printed: 08/10/2012

Carolina Biological Supply Company

2700 York Rd | Burlington, NC 27215 • to order: 800.334.5551 • for support: 800.227.1150

CAROLINA
www.carolina.com

Section 1 - Product Description

Product Name: Aluminum Powder
Product Code(s): 84-3068, 84-3070
Size: 100 g, 500 g
Chemical Name: Aluminum
CAS Number: 7429-90-5
Formula: Al
Synonyms: Aluminum Flake, Sparkler Mix
Distributor: Carolina Biological Supply Company, 2700 York Road, Burlington, NC 27215
Chemical Information: 800-227-1150 (8am-5pm (ET) M-F) **Chemtrec** 800-424-9300 (Transportation Spill Response 24 hours)

Section 2 - Hazard Identification

Emergency Overview: Flammable. Inhalation of dust linked to pulmonary fibrosis. Contact with water liberates extremely flammable gases. Irritating to respiratory system and skin.

Potential Health Effects:

Eyes: May cause irritation.	Skin: May cause irritation to skin.
Ingestion: May cause gastrointestinal discomfort.	Inhalation: May severely irritate or damage mucous membranes and respiratory tract.

Section 3 - Composition / Information on Ingredients

Principal Hazardous Components: Aluminum Powder (CAS #7429-90-5) 96 - 99%
TLV units: ACGIH-TLV 10 mg/m³ (TWA) Metal Dust
PEL units: OSHA-PEL 15 mg/m³ (TWA) Metal Total Dust

Section 4 - First Aid Measures

Emergency and First Aid Procedures:

Eyes - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Skin - After contact with skin, wash immediately with plenty of water.

Ingestion - If swallowed, rinse mouth with water (only if the person is conscious).

Inhalation - In case of accident by inhalation: remove casualty to fresh air and keep at rest.

Section 5 - Firefighting Procedures

Flash Point (Method Used): N/A

NFPA Rating:

Health: 2

Fire: 3

Reactivity: 2

Extinguisher Media: Use dry chemical, CO2 or appropriate foam.

Flammable Limits in Air % by Volume: N/A N/A

Autoignition Temperature: N/A

Special Firefighting Procedures: Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

Unusual Fire and Explosion Hazards: Explosive when mixed with oxidising substances.

Reacts with some acids and bases to form hydrogen gas.

Section 6 - Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled: Ventilate area of spill. Eliminate all sources of ignition. Remove all non-essential personnel from area. Clean-up personnel should wear proper protective equipment and clothing. Absorb material with suitable absorbent and containerize for disposal.

Section 7 - Special Precautions

Precautions to Take in Handling or Storing: Keep away from ... (incompatible materials to be indicated by the manufacturer). Keep container tightly closed in a cool, well-ventilated place.

Section 8 - Protection Information

Respiratory Protection (Specify Type): None needed under normal conditions of use with adequate ventilation. A NIOSH/MSHA chemical cartridge respirator should be worn if PEL or TLV is exceeded.

Ventilation:

Local Exhaust: Yes

Mechanical(General): Yes

Special: No

Other: No

Protective Gloves: Natural rubber, Neoprene, PVC or equivalent.

Eye Protection: Splash proof chemical safety goggles should be worn.

Other Protective Clothing or Equipment: Lab coat, apron, eye wash, safety shower.

Section 9 - Physical Data

Molecular Weight: 26.98

Boiling Point: 2327 °C

Vapor Density(Air=1): N/A

Percent Volatile by Volume: N/A

Solubility in Water: Practically Insoluble

Melting Point: 660 °C

Vapor Pressure: 0.00013 hPa at 974 °C

Specific Gravity (H2O=1): 2.702

Evaporation Rate (BuAc=1): N/A

Appearance and Odor: Silverly colored metal, odorless.

Section 10 - Reactivity Data

Stability: Stable

Conditions to Avoid: Avoid Dusting. May become explosive when dispersed in air.

Contact with acids liberates toxic gas.

Incompatibility (Materials to Avoid): Acids, Oxidizers, Heavy Metals, Alkalis, Halogenated compounds (Cl, F, Br),

Hazardous Decomposition Products: Aluminum oxide dust,

Hazardous Polymerization: Will not occur

Section 11 - Toxicity Data

Toxicity Data: N/A

Effects of Overexposure:**Acute:** See Section 2**Chronic:** Not listed as a carcinogen by IARC, NTP or OSHA.**Conditions Aggravated by Overexposure:** Respiratory disorders,**Target Organs:** Eyes, Respiratory system,**Primary Route(s) of Entry:** Inhalation.

Section 12 - Ecological Data

EPA Waste Numbers: N/A

Section 13 - Disposal Information

Waste Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.

Section 14 - Transport Information

DOT Proper Shipping Name: UN1396, Aluminum Powder, uncoated, 4.3, II

Section 15 - Regulatory Information

EPA TSCA Status: On TSCA Inventory**Hazard Category for SARA Section 311/312 Reporting:** Acute Reaction**Name List:**

Aluminum - No

Chemical Category:

Aluminum - No

CERCLA Section 103 RQ(lb.): Aluminum - No**RCRA Section 261.33:** Aluminum - No

Section 16 - Additional Information

The information provided in this Material Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the Material Safety Data Sheet. Any employer must carefully assess the applicability of any information contained herein in regards to the particular use to which the employer puts the material.

Glossary

ACGIH	American Conference of Governmental Industrial Hygienists
CAS Number	Chemical Services Abstract Number
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DOT	U.S. Department of Transportation
IARC	International Agency of Research on Cancer
N/A	Not Available
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
ppm	Parts per million
RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendments and Reauthorization Act
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act