Aluminum Metal Powder

MSDS # 27.10

Section 1: Product and Company Identification

Aluminum Metal Powder

Synonyms/General Names: N/A
Product Use: For educational use only
Manufacturer: Columbus Chemical Industries, Inc., Columbus, WI 53925.

24 Hour Emergency Information Telephone Numbers

CHEMTREC (USA): 800-424-9300 **CANUTEC (Canada): 613-424-6666**

ScholAR Chemistry; 5100 W. Henrietta Rd, Rochester, NY 14586; (866) 260-0501; www.Scholarchemistry.com

Section 2: Hazards Identification

Silver-grey metal powder; no odor.

HMIS (0 to 4)

Health	**0**
Fire Hazard	**1**
Reactivity	**0**

CAUTION! Combustible solid.
Flammable solid, keep away from all ignition sources. Dangerous when wet.
Target organs: None known

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Section 3: Composition / Information on Ingredients

Aluminum (7429-90-5), 100%

Section 4: First Aid Measures

Always seek professional medical attention after first aid measures are provided.

Eyes: Immediately flush eyes with excess water for 15 minutes, lifting lower and upper eyelids occasionally.
Skin: Immediately flush skin with excess water for 15 minutes while removing contaminated clothing.
Ingestion: Call Poison Control immediately. **Aspiration hazard**. Rinse mouth with cold water. Give victim 1-2 tbsp of activated charcoal mixed with 8 oz water.
Inhalation: Remove to fresh air. If not breathing, give artificial respiration.

Section 5: Fire Fighting Measures

Combustible solid. When heated to decomposition, emits acrid fumes. Dangerous when wet.
Protective equipment and precautions for firefighters: Do not use carbon dioxide, foam, water or halogenated extinguishing agents. Use class D extinguisher or smother with soda ash, dry sand, dry clay, dry sodium chloride or dry graphite. Firefighters should wear full fire fighting turn-out gear and respiratory protection (SCBA). Cool container with water spray. Material is not sensitive to mechanical impact or static discharge.

Section 6: Accidental Release Measures

Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Remove all ignition sources and ventilate area. Contain spill with sand or absorbent material and place material in a sealed bag or container for disposal. Wash spill area after pickup is complete. See Section 13 for disposal information.

Section 7: Handling and Storage Red

Handling: Use with adequate ventilation and do not breathe dust or vapor. Avoid contact with skin, eyes, or clothing. Wash hands thoroughly after handling.
Storage: Store in Flammable Area [Red Storage] with other flammable materials and away from any strong oxidizers. Store in a dedicated flammables cabinet. Store in a cool, dry, well-ventilated, locked store room away from incompatible materials.

Section 8: Exposure Controls / Personal Protection

Use ventilation to keep airborne concentrations below exposure limits. Have approved eyewash facility, safety shower, and fire extinguishers readily available. Wear chemical splash goggles and chemical resistant clothing such as gloves and aprons. Wash hands thoroughly after handling material and before eating or drinking. Use NIOSH-approved respirator with a dust cartridge. Exposure guidelines: Aluminum: OSHA PEL: N/A; ACGIH TLV: 5 mg/m^3, STEL: N/A.

Section 9: Physical and Chemical Properties

Molecular formula	Al.	**Appearance**	Silver-grey metal powder.
Molecular weight	26.98.	**Odor**	No odor .
Specific Gravity	2.70 g/mL @ 20°C.	**Odor Threshold**	N/A.
Vapor Density (air=1)	N/A.	**Solubility**	Insoluble.
Melting Point	660°C.	**Evaporation rate**	N/A *(Butyl acetate = 1).*
Boiling Point/Range	2327°C.	**Partition Coefficient**	N/A *(log P_{OW}).*
Vapor Pressure (20°C)	N/A.	**pH**	N/A.
Flash Point:	N/A.	**LEL**	N/A.
Autoignition Temp.:	N/A.	**UEL**	N/A .

N/A = Not available or applicable

Section 10: Stability and Reactivity

Avoid heat and ignition sources.
Stability: Stable under normal conditions of use.
Incompatibility: Strong oxidizers, mineral acids, strong alkalis, water, halogenated hydrocarbons.
Shelf life: Indefinite if stored properly.

Section 11: Toxicology Information

Acute Symptoms/Signs of exposure: ***Eyes***: Stinging pain, watering of eyes, inflammation of eyelids and conjunctivitis. ***Skin***: Insensitivity to pain, feel of coolness or cold, skin looks white and feels hard and cold. ***Ingestion***: Mental confusion, drowsiness, nausea, vomiting and headache. ***Inhalation***: Rapid irregular breathing, headache, fatigue, mental confusion, nausea and vomiting..
Chronic Effects: Repeated/prolonged skin contact may cause dryness or rashes.
Sensitization: none expected
Aluminum: LD50 [oral, rat]; N/A; LC50 [rat]; N/A; LD50 Dermal [rabbit]; N/A
Material has not been found to be a carcinogen nor produce genetic, reproductive, or developmental effects.

Section 12: Ecological Information

Ecotoxicity (aquatic and terrestrial): Ecological impact has not been determined

Section 13: Disposal Considerations

Check with all applicable local, regional, and national laws and regulations. Local regulations may be more stringent than regional or national regulations. Small amounts of this material may be suitable for sanitary sewer or trash disposal.

Section 14: Transport Information

DOT Shipping Name:	Aluminum Powder, uncoated.	**Canada TDG:**	Aluminum Powder, uncoated.
DOT Hazard Class:	4.3, pg II.	**Hazard Class:**	4.3, pg II **.**
Identification Number:	UN1396.	**UN Number:**	UN1396.

Section 15: Regulatory Information

EINECS: Listed (231-072-3) .
TSCA: All components are listed or are exempt.
WHMIS Canada: Not WHMIS controlled.
California Proposition 65: Not listed.

The product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Section 16: Other Information

Current Issue Date: January 23, 2009