

Safety Data Sheet (SDS)

7/29/2024: File reviewed, more current MSDS/SDS not available. CAS

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Aluminum

Signal Word

N/A

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261

Chemtrec Emergency Phone Number: (800) 424-9372

Pictograms

SECTION 2 — HAZARDS IDENTIFICATION

This chemical is considered nonhazardous according to GHS classifications for the Hazard Communication Standard. Treat all laboratory chemicals with caution.

Although this material is considered to be nonhazardous, unpredictable reactions among chemicals are always possible. Prudent laboratory practices should be observed.

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Aluminum	7429-90-5	Al	26.98	
Synonyms: Aluminum foil, strips, wire, sheet				

SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell.

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing.

If on skin: Wash with plenty of water.

If swallowed: Rinse mouth. Call a POISON CENTER or physician if you feel unwell.

SECTION 5 — FIRE FIGHTING MEASURES

Aluminum, as dust, is a flammable solid.

NFPA Code

Powder Autoignition Temperature: 760 °C

H-0

When heated to decomposition, may emit toxic fumes.

F-3

In case of fire: Use a class D fire extinguisher or dry sand for extinction (P370+P378). Never use water.

R-1

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Contain spill. Add sand or absorbent material to the zinc dust. Gather mixture and deposit in sealed bag or container. Dispose of bag or container. Wash spill site only after material pickup is complete. See Sections 8 and 13 for further information.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Inorganic #1. Store with metals and metal hydrides.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, eye protection, and face protection (P280). Wash hands thoroughly after handling.

Exposure guidelines: (as total dust) PEL 15 mg/m³ (OSHA); (as respirable fraction) TLV 1 mg/m³ (ACGIH)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Silvery solid. Odorless.

Boiling point: 2467 °C

Insoluble in water. Heat is generated when fine powder and dust are mixed with water.

Melting point: 660 °C

Specific gravity: 2.70

SECTION 10 — STABILITY AND REACTIVITY

Contact with acids liberates flammable hydrogen gas. Contact with water generates heat.

Avoid contact with acids, acid chlorides, oxidizers, and halogens.

Shelf life: Indefinite, if stored properly.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: N.A.

ORL-RAT LD₅₀: N.A.

Chronic effects: Pneumoconiosis

IHL-RAT LC₅₀: N.A.

Target organs: Lungs

SKN-RBT LD₅₀: N.A.

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding.

Flinn Suggested Disposal Method #26a is one option. Do not allow aluminum dust to become wet. See Section 6 for further information.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Not dangerous good

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (231-072-3)

SECTION 16 — OTHER INFORMATION

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N.A. = Not available, not all health aspects of this substance have been fully investigated.

N/A = Not applicable

Consult your copy of the Flinn Science Catalog/Reference Manual for additional information about laboratory chemicals.

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