

Safety Data Sheet

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2024
Issue date: 8/13/2026 Revision date: 8/13/2026 Version: 1.0

SECTION 1 Identification

1.1. Product identifier

Product name : Uncoated Aluminum metal, 5XXX

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Use of substance/mixture : Primary (industrial) metal sheet

1.4. Supplier's details

Supplier

Aluminum Dynamics, LLC
3413 Charleigh D.Ford Jr Drive
Columbus, MS, 39701
USA
T (662) 352-0500

1.5. Emergency phone number

Emergency number : For 24 hour emergency information call:
CHEMTREC (800) 424-9300

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

Not classified

2.2. Label elements

GHS US labeling

No labeling applicable

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

Not a fire hazard unless in particle form. Suspensions of aluminum dust in air may pose a severe explosion hazard. May become reactive with water or self-heating when cut, sanded, drilled, or otherwise processed.

2.5. Unknown acute toxicity

Not applicable

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

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3.2. Mixtures

Name	Product identifier	Conc. (% w/w) Weight*
Aluminum	CAS-No.: 7429-90-5	80 – 100

Comments : *Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

- First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
- First-aid measures after skin contact : If skin irritation occurs: Wash skin with plenty of water. Obtain medical attention if irritation persists. Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages.
- First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms/effects, acute and delayed

- Symptoms/effects after inhalation : May cause irritation to the respiratory tract.
- Symptoms/effects after skin contact : May cause skin irritation. Repeated exposure may cause skin dryness or cracking.
- Symptoms/effects after eye contact : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
- Symptoms/effects after ingestion : May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

- Other medical advice or treatment : Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : For aluminum fires, use a class D dry-powder extinguisher (Lith-X).
- Unsuitable extinguishing media : Do not use water jet. Do not use water or halogen agents.

5.2. Specific hazards arising from the chemical

- Fire hazard : Products of combustion may include, and are not limited to: oxides of carbon. Flammable solid or self heating if cut drilled sanded etc. May be flammable and explosive when in dust cloud, depending on the concentration of the powder in a given area and the particle size of the powder. Aluminum oxides. magnesium oxide. Manganese oxide. Silicone dioxide. Zinc oxide.
- Explosion hazard : May form flammable/explosive vapor-air mixture. Not a fire hazard unless in particle form. Suspensions of aluminum dust in air may pose a severe explosion hazard. A potential for explosion exists for a mixture of fine and coarse particles if at least 15% to 20% of the material is finer than 44 microns (325 mesh). Buffing and polishing generate finer material than grinding, sawing, and cutting.

5.3. Special protective equipment and precautions for fire-fighters

- Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

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SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking.

For non-emergency personnel

No additional information available

For emergency responders

Environmental precautions : Prevent entry to sewers and public waters.

6.2. Methods and materials for containment and cleaning up

For containment : Contain spill, then place in a suitable container. Minimize dust generation. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for cleaning up : Sweep or shovel spills into appropriate container for disposal. Provide ventilation.

For further information refer to section 8: "Exposure controls/personal protection"

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke. Good housekeeping is important to prevent accumulation of dust. No open flames. No smoking. Protect from moisture. Handle under inert gas. Use only in well ventilated areas.

Hygiene measures : Wash contaminated clothing before reuse. Always wash hands after handling the product.

Additional hazards when processed : Handle empty containers with care because residual vapors are flammable. Keep away from any possible contact with water, because of violent reaction and possible flash fire.

7.2. Conditions for safe storage, including incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Maintain air gap between stacks/pallets.

Storage conditions : Keep out of the reach of children. Keep container tightly closed. Store in a dry, cool and well-ventilated place. Heat sources. Direct sunlight. Keep in fireproof place. Store in a dry place. Protect from moisture.

Incompatible materials for storage : Keep away from any possible contact with water, because of violent reaction and possible flash fire applies only if cut drilled sanded etc

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

Aluminum (7429-90-5)	
USA - ACGIH® - Threshold Limit Values	
Local name	Aluminum, metal and insoluble compounds
ACGIH® TLV® TWA	1 mg/m³ (respirable particulate matter)

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Aluminum (7429-90-5)	
Remark (ACGIH®)	TLV® Basis: Pneumoconiosis; LRT irr; neurotoxicity. Notations: A4 (Not classifiable as a Human Carcinogen)
ACGIH® chemical category	Not Classifiable as a Human Carcinogen
Regulatory reference	ACGIH 2025
USA - OSHA - Occupational Exposure Limits	
Local name	Aluminum Metal (as Al)
OSHA PEL TWA	15 mg/m³ (total dust) 5 mg/m³ (respirable fraction)
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
USA - NIOSH - Occupational Exposure Limits	
Local name	Aluminum Metal (as Al)
NIOSH REL (TWA)	10 mg/m³ (total dust) 5 mg/m³ (respirable dust)
NIOSH REL 10h TWA	10 mg/m³ (Total dust) 5 mg/m³ (Respirable fraction)
Regulatory reference (US-NIOSH)	OSHA Annotated Table Z-1 (NIOSH Pocket Guide to Chemical Hazards (NPG))

8.2. Appropriate engineering controls

- Appropriate engineering controls
- : Ensure good ventilation of the work station.
- Environmental exposure controls
- : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

Hand protection:
Wear suitable gloves. Consult glove manufacturer's product information on material suitability and material thickness.
Eye protection:
Safety glasses or goggles are recommended when using product.
Skin and body protection:
Wear suitable protective clothing. apron. Long sleeved protective clothing
Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. SDSs cannot provide detailed and complete respiratory protection guidelines. Selection of respiratory protection must be done by a qualified person who has assessed the work environment.

- Other information:**
- Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

- Physical state
- : Solid
- Color
- : Grey to silver
- Odor
- : Odorless
- Odor threshold
- : No data available

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pH	: No data available
Melting point	: 482 °C (900°F) - 660°C (1220°F)
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Flammability (solid, gas)	: Not flammable. Self-heating; may catch fire. In contact with water releases flammable gases which may ignite spontaneously applies only if if cut drilled sanded etc
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Specific gravity	: 2.5 - 2.9
Solubility	: No data available
Partition coefficient n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Explosion limits	: No data available
Particle characteristics	: No data available

Aluminum	
Boiling point	2467 °C (at 101.325 hPa)
Auto-ignition temperature	590 °C
Vapor pressure	0.00013 hPa (at 974 °C)

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under normal conditions. Flammable solid. May form flammable/explosive vapor-air mixture. Self-heating; may catch fire.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. In contact with water releases flammable gases which may ignite spontaneously applies only if if cut drilled sanded etc

10.4. Conditions to avoid

Heat. Open flame. Overheating. Direct sunlight. Sparks. Incompatible materials. For wetted coil of foil: In coils of aluminum foil immersed in water, a vigorous oxidation reaction may occur, producing hydrogen gas and heat. When the coils are removed from the cooling effect of the water, this reaction accelerates, large amounts of steam are produced, the temperature rises significantly, and hydrogen gas can reach concentrations over the lower explosive limit (4.1%): this can result in an explosive rupture of the coils. Rupture of a coil may occur even when the coil is only partly immersed in water, and the immersion time is short.

10.5. Incompatible materials

Molten aluminum. Strong oxidizing agents

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon. May release flammable gases.

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SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Aluminum (7429-90-5)

LD50 oral rat	> 15900 mg/kg body weight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
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LC50 inhalation rat	> 0.888 mg/l air Animal: rat, Animal sex: male, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)
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Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified

Aluminum (7429-90-5)

NOAEL (animal/male, F0/P)	1000 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
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STOT-single exposure : Not classified
STOT-repeated exposure : Not classified

Aluminum (7429-90-5)

LOAEC (inhalation, rat, dust/mist/fume, 90 days)	0.05 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)
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NOAEL (subchronic,oral,animal/male,90 days)	1034 mg/kg body weight Animal: dog, Animal sex: male, Guideline: OECD Guideline 409 (Repeated Dose 90-Day Oral Toxicity Study in Non-Rodents)
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NOAEL (subchronic,oral,animal/female,90 days)	1087 mg/kg body weight Animal: dog, Animal sex: female, Guideline: OECD Guideline 409 (Repeated Dose 90-Day Oral Toxicity Study in Non-Rodents)
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Aspiration hazard : Not classified
Symptoms/effects after inhalation : May cause irritation to the respiratory tract.
Symptoms/effects after skin contact : May cause skin irritation. Repeated exposure may cause skin dryness or cracking.
Symptoms/effects after eye contact : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
Symptoms/effects after ingestion : May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Other information : Likely routes of exposure: ingestion, inhalation, skin and eye.

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.
Hazardous to the aquatic environment, short-term (acute) : Not classified
Hazardous to the aquatic environment, long-term (chronic) : Not classified

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Aluminum (7429-90-5)	
EC50 72h - Algae [1]	1.05 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	0.2 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

12.2. Persistence and degradability

Uncoated Aluminum metal, 5XXX	
Persistence and degradability	Not established.
Aluminum (7429-90-5)	
Persistence and degradability	Rapidly degradable

12.3. Bioaccumulative potential

Uncoated Aluminum metal, 5XXX	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Ozone	: Not classified
Fluorinated greenhouse gases	: No
Other information	: No other effects known.

SECTION 13 Disposal considerations

Product/Packaging disposal recommendations	: Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
Additional information	: Handle empty containers with care because residual vapors are flammable.

SECTION 14 Transport information

In accordance with DOT

14.1. UN number	
UN-No. (DOT)	: Not applicable
14.2. UN Proper Shipping Name	
Proper Shipping Name (DOT)	: Not applicable
14.3. Transport hazard class(es)	
DOT	
Transport hazard class(es) (DOT)	: Not applicable
14.4. Packing group	
Packing group (DOT)	: Not applicable

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14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

Not applicable

SECTION 15 Regulatory information

15.1. Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.:

Contains chemical(s) subject to TSCA 12b export notification if product is shipped outside the U.S

Zinc	CAS-No. 7440-66-6
Lead	CAS-No. 7439-92-1

15.2. International regulations

No additional information available

15.3. State regulations

 **WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

SECTION 16 Other information

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Revision date : 8/13/2026
Issue date : 8/13/2026
Other information : None.
Prepared by : Nexreg Compliance Inc.
www.Nexreg.com



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