



Safety Data Sheet

In accordance with CFR 1910.1200 (OSHA HCS)

SDS No. 1282

Date of review: November 18, 2019

1 Identification of substance and company

Product name: **Aluminum metal coarse powder and pieces**
Product code: 11156, 12165, 12214, 13916, 14608, 15181, 90298, 90512
Relevant use and restrictions on use: Research and product development
Manufacturer/Supplier: Noah Technologies Corporation
1 Noah Park
San Antonio, Texas 78249-3419
Phone: 210-691-2000
Fax: 210-691-2600
Web site: www.noahtech.com
Emergency information: CHEMTREC
800-424-9300

2 Hazards identification

Emergency Overview:

This substance is not hazardous and is not classified under GHS in the form supplied

Signal word(s): None
Pictogram(s): None
Hazard statements: None
Precautionary statements: None
Hazards not otherwise classified: None
Ingredients of unknown acute toxicity: None
GHS Classification: None
HMIS ratings (scale 0-4):
Health hazard: 1
Flammability: 0
Physical hazard: 0

3 Composition/Information on ingredients

Chemical name: Aluminum metal coarse powder and pieces
Designation:
CAS number: 7429-90-5
EC number: 231-072-3
Formula: Al
Synonyms: None
Ingredients of known acute toxicity: None

4 First aid measures

After inhalation: Supply fresh air. If required, provide artificial respiration. Keep patient warm.
If irritation persists seek medical advice
After skin contact: Immediately wash with water and soap and rinse thoroughly
If irritation persists seek medical advice
After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
After ingestion: Seek medical advice if you feel unwell
Information for doctor: Show this safety data sheet to the doctor in attendance
Symptoms/effects; acute and delayed: May be harmful if swallowed or inhaled. Aluminum in aerosols has been implicated in Alzheimer's disease.
Product may cause irritation to the eyes, skin and respiratory system.
Immediate medical attention and special treatment needed: No further relevant information available

5 Fire-fighting measures

Suitable and unsuitable extinguishing agents: Use a Class D dry powder extinguisher, dolomite, dry sand, graphite, or soda ash. Do NOT use carbon dioxide, sodium bicarbonate, halogenated extinguishing agents, foam, or water.
Special hazards caused by the material, its products of combustion or resulting gases: Dusts at sufficient concentrations can form explosive mixtures with air

Aluminum oxide

Special fire fighting procedures: Wear SCBA. Always wear fully protective fire fighting equipment/clothing in fire situations.

6 Accidental release measures

Person-related safety precautions: Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation.
Measures for environmental protection: Do not allow material to be released to the environment without proper governmental permits
Measures for cleaning/collecting: Avoid raising dust. Sweep or scoop up and remove. Wear appropriate personal protective equipment.
Ventilate area and wash spill site after material pickup is complete
Additional information: See Section 7 for information on safe handling
See Section 8 for information on personal protective equipment
See Section 13 for information on disposal
See Section 15 for regulatory information

7 Handling and storage

Information for safe handling: Wash thoroughly after handling. Do not get in eyes, on skin or on clothing. Do not breathe dust, vapor mist, or gas.
Information about protection against explosions and fires: See below
Storage requirements to be met by storerooms and containers: Store in a cool, dry place
Incompatibility (avoid contact with): Air-moisture sensitive. Halogens, violent or explosive reactions when heated with metal oxides, oxosalts (nitrates, sulfates); or sulfides. Potentially explosive reaction with carbon tetrachloride during ball milling operations.
Violent/explosive reactions with many halocarbons.
Further information about storage conditions: Store away from incompatibles

8 Exposure controls/personal protection

Ventilation requirements: Chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute
Components with exposure limits that require monitoring: OSHA PEL: TWA 15 mg(Al)/m³:8H
ACGIH TLV: TWA 10 mg(Al)/m³:8H
Additional information: No data
General protective and hygienic measures: The usual precautionary measures for handling chemicals should be adhered to
Keep away from foodstuffs, beverages and food
Instantly remove any soiled and impregnated garments
Wash hands during breaks and at the end of the work
Avoid contact with the eyes and skin
Personal protective equipment:
Respiratory protection: Filter-dust, fume, mist
(Use only NIOSH or CEN approved Equipment)
Hand protection: Impervious gloves. Check protective gloves prior to each use for their proper condition.
Eye protection: Safety glasses
Skin protection: Protective work clothing
Additional protective equipment: Sufficient to prevent contact. Emergency eyewash and safety shower.
Precautionary labeling: Wash thoroughly after handling. Do not get in eyes, on skin or on clothing. Do not breathe dust, vapor mist, or gas.

9 Physical and chemical properties

Physical state: Granules or pieces
Color: Grey-silver metallic
Odor: Odorless
Odor threshold: Not determined
Molecular Weight (Calculated): 26.98
pH Not determined
Melting point/freezing point/range: 660 °C
Boiling point/range: 2467 °C
Sublimation temperature/start: Not determined
Decomposition temperature: Not determined
Flammability (solid, gas): Not determined
Flash point: Not determined
Autoignition temperature: Not determined
Danger of explosion: Not determined
Flammable limits:
Lower: Not determined
Upper: Not determined
Evaporation Rate: Not determined
Vapor pressure (mm Hg): Not determined
Vapor density: Not determined

Specific gravity:	2.70
Bulk density:	Not determined
Solubility in/Miscibility with water:	Insoluble
Partition coefficient n-octanol/water:	Not determined
Viscosity:	Not determined
Other information:	No further relevant information available

10 Stability and reactivity

Reactivity:	No information known
Chemical stability:	Stable
Possibility of hazardous reactions:	Reacts vigorously with oxidizing materials, strong acids, strong bases, halogens and carbon tetrachloride
Conditions to be avoided:	See section 7 for information on proper handling and storage
Materials to be avoided:	Strong acids, strong bases, oxidizing materials, halogens, carbon tetrachloride
Hazardous decomposition products: (thermal and other)	Toxic metal fumes

11 Toxicological information

LD/LC50 values that are relevant for classification:	No data available
Irritation or corrosion of skin:	No data available
Irritation or corrosion of eyes:	No data available
Primary irritant or corrosive effect: on the skin:	May cause irritation
on the eye:	May cause irritation
Sensitization:	No sensitizing effects known
Potential health effects:	
Inhalation:	See below
Ingestion:	See below
Skin:	May cause irritation
Eyes:	May cause irritation
Signs and symptoms of exposure:	May be harmful if swallowed or inhaled. Aluminum in aerosols has been implicated in Alzheimer's disease. Product may cause irritation to the eyes, skin and respiratory system. To the best of our knowledge the acute and chronic toxicity of this substance is not fully known
Carcinogenicity:	No data available

12 Ecotoxicological information

Toxicity:	
Toxicity to fish:	No data available
Toxicity to daphnia and other aquatic invertebrates:	No data available
Toxicity to algae:	No data available
Persistence and degradability:	
Biodegradability:	No further relevant information available
Bioaccumulative potential:	
Bioaccumulation:	No data available
Mobility in soil:	No further relevant information available
Other adverse effects:	No further relevant information available

13 Disposal considerations

Recommendation:	Consult state, local or national regulation for proper disposal Allow professional disposal company to handle waste Must be specially treated under adherence to official regulations
Unclean packagings recommendation:	Disposal must be made according to official regulations

14 Transport information

Land transport DOT (domestic)

Proper shipping name:	Chemicals Non-Hazardous
Technical name:	Aluminum metal

Air transport ICAO-TI and IATA-DGR:

Proper shipping name:	Chemicals Non-Hazardous
Technical name:	Aluminum metal

UPS Ground / FedEx Ground

Proper shipping name: Chemicals Non-Hazardous
Technical name: Aluminum metal

UPS Air

Proper shipping name: Chemicals Non-Hazardous
Technical name: Aluminum metal

15 Regulatory information

SARA Section 302 Extremely Hazardous components and corresponding TPQs: Substance not listed
SARA Section 311 / 312 hazards: Substance not listed
SARA Section 313 components: Substance not listed
California Proposition 65 components: Substance not listed
TSCA: Substance is listed on TSCA Inventory

16 Other information

The above information is accurate to the best of our knowledge. However, since data, safety standards and government regulation are subject to change and the conditions of handling and use, or misuse are beyond our control. NOAH MAKES NO WARRANTY, EITHER EXPRESSED OR IMPLIED, WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN AND DISCLAIMS ALL LIABILITY FOR RELIANCE THEREON. User should satisfy himself that he has all current data relevant to his particular use.