



SAFETY DATA SHEET

Identity: Aluminum oxynitride

Formula: Al₃NO₃H₂O

Alternative Name: (Aluminum Nitrate Hydrate)

Alternative Formula: Al(NO₃)₃·xH₂O (x≈9)

SECTION I - GENERAL INFORMATION

Manufacturer: Super Conductor Materials, Inc.

The information below is believed to be accurate and represents the best information available to Super Conductor Materials, Inc. However, SCM makes no warranty, expressed or implied with respect to such information and assumes no liability resulting from its use.

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Molecular weight: 212.99 (anhy)

CAS #	OSHA PEL	ACGIH TLV	%
25838-59-9	NE	NE	NE

SECTION III – PHYSICAL/CHEMICAL CHARACTERISTICS

Physical States: Solid

Boiling Point:

Vapor Pressure (vs. air or mmHg): N/A

Melting Point: 73.5°C (164°F)

Specific Gravity (Water=1): N/A

Evaporation Rate: N/A

Flash Point: N/A

Solubility in water: Soluble

Appearance and odor: Crystalline white, odorless

SECTION IV - FIRE AND EXPLOSION HAZARD DATA:

Method Used: Unknown

Explosive Limits: LEL: N/A

UEL: N/A

Extinguishing Media: Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special Fire Fighting Procedures: Firefighters must wear full face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. Fumes from fire are hazardous. Isolate runoff to prevent environmental pollution.



Unusual Fire and Explosion Hazards: This substance is an oxidizer and its heat of reaction with reducing agents or combustibles may cause ignition. If this product is involved in a fire, nitrogen oxidizents (NOx) and metal oxide fume can be released.

SECTION V - REACTIVITY DATA

Stability: Stable under recommended storage conditions

Conditions to Avoid (instability): Decompositin will not occur if used and stored according to specifications

Incompatibility (Materials to avoid): Flammable substance, reducing agents, water/moisture, organic materials, and metal powders

Hazardous Decomposition or Byproducts: Nitrogen oxides and metal oxide fume

Hazardous Polymerization: N/A

Conditions to avoid (hazardous polymerization): Reacts with reducing agents and flammable substances

SECTION VI - HEALTH HAZARD DATA

Routes of entry: Inhalation? Yes Ingestion? Yes Eyes? Yes Skin? Yes Other? No

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

Signs and Symptoms of Overexposure:

Inhalation: N/A

Ingestion: N/A

Skin: Causes skin irritation

Eye: Causes serious eye irritation

Health Hazards (Acute and Chronic): No Data Available

Target Organs: N/A

Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No

Medical Conditions Aggravated by Exposure: N/A

Emergency and First Aid Procedures:

Inhalation: Remove victim to fresh air, keep warm and quiet, and give oxygen if breathing is difficult; seek medical attention

Ingestion: Give 1-2 glasses of milk or water and induce vomiting, seek medical attention. Never induce vomiting or give anything by mouth to an unconscious person

Skin: Remove contaminated clothing, brush material off skin, wash affected area with mild soap and water, and seek medical attention if symptoms persist

Eye: Flush eyes with lukewarm water, lifting upper and lower eyelids for at least 15 minutes and seek medical attention.



SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be taken in case material is released or spilled:

Wear appropriate respiratory and protective equipment specified in section VIII. Isolate spill area, provide ventilation and extinguish sources of ignition. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for proper disposal. Take care not to raise dust.

Waste disposal method:

Dispose of in accordance with state, local, and federal regulations.

Hazard Label Information:

Store in cool, dry area and in tightly sealed container. Wash thoroughly after handling.

Precautions: Substance/product can reduce the ignition temperature of flammable substances. This substance is an oxidizer and its heat of reaction with reducing agents or combustibles may cause ignition. It is also hygroscopic. Protect from humidity and water.

SECTION VIII - CONTROL MEASURES

Protective Equipment Summary (Hazard Label Information):

NIOSH approved respirator, impervious gloves, safety glasses, clothes to prevent contact.

Ventilation:

Local Exhaust: To maintain concentration at or below the PEL, TLV
Mechanical (General): Recommended

Work/Hygienic/Maintenance Practices:

Implement engineering and work practice controls to reduce and maintain concentration of exposure at low levels. Use good housekeeping and sanitation practices. Do not use tobacco or food in work area. Wash thoroughly before eating or smoking. Do not blow dust off clothing or skin with compressed air.

Please be advised that N/A can either mean Not Applicable or No Data Has Been Established