

Material Safety Data Sheet

Identity: Aluminum Nitride
Chemical Family: Metal Nitride
TCSA: Product is Listed

Formula: AlN
Chem. Abstract No: 24304-00-5
Cal. Molecular Wt: 40.99

SECTION I - GENERAL INFORMATION

Manufacturer: [Stanford Advanced Materials](#) (SAM)

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

SECTION II - INGREDIENTS/SUMMARY OF HAZARDS INFORMATION

Ingredients	CAS#	%	TLV	OSHA PEL
Aluminum Nitride	24304-00-5	100	10mg(Al)/m3	15mg(Al)/m3

SECTION III - PHYSICAL DATA

Boiling Point: ND
Point: ND
Evaporation Rate: ND
Solubility in water: Decomposes
% Volatile by Volume: 0
Appearance and odor: pale gray powder, ammonia odor in moist air.

Vapor Pressure: ND Melting
Density: (gm/cc): 3.26
Flash Point: N/A
Reaction with water: ND
Melting Point (°C): 2150-2200

SECTION IV - FIRE AND EXPLOSION HAZARD DATA:

Flashpoint/Method: NA
Autoignition Temp (°C): 1204°F for ammonia
Flammability: Non-flammable in most instances.
Extinguishing Media: Dry chemical, DO NOT USE WATER!

Special Fire Fighting Procedures: Wear NIOSH/MSHA approved self-contained breathing apparatus, and full protective clothing. Use of water will cause evolution of ammonia which could be flammable. Unusual Fire and Explosion Hazards: Not a fire hazard in most conditions.

Unusual Fire and Explosion Hazards: None recorded

SECTION V - REACTIVITY DATA

Stability: Stable

Conditions to Avoid (stability): None

Incompatibility: Acids

Hazardous Decomposition or Byproducts: Fumes

Hazardous Polymerization: Will not occur

Conditions to avoid (hazardous polymerization): None

SECTION VI - HEALTH HAZARD DATA

Health hazards/Acute and Chronic:

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

Routes of entry: Inhalation? Skin? Eyes? Ingestion? Other?

Signs and Symptoms of Overexposure:

Inhalation: Dusts may cause pulmonary disease, nausea and or dizziness.

Ingestion: May cause abdominal pain, nausea, diarrhea, vomiting, and or dizziness.

Skin: May cause redness, itching, or burning.

Eye: May cause redness, itching, burning, swelling, and/or watering.

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

Medical Conditions Aggravated by Exposure: Pre-existing respiratory disorders.

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.

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 low exposure levels.

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
