

Material Safety Data Sheet (MSDS)

Product Name: Ammonium Chloride

SECTION 1: Chemical Product and Company Identification

Shegerf Fidar Shimi Sava Co.

IRAN

Shop Center: +9825-33354788

+989125698324

Email: Shegerfchemsava@gmail.com

Website: WWW.Shegerfshimi.com

Address: no 216,3rd East, emam Ali blvd,2nd Phase, Mahmoud Abad Industrial Park, Qom, Iran

SECTION 2: Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
12125-02-9	Ammonium chloride	Min 99.5	235-186-4

Hazard Symbols: XN

Risk Phrases: 22 36

• SECTION 3: Hazards Identification

EMERGENCY OVERVIEW

Appearance: colorless or white. **Caution!** May cause respiratory and digestive tract irritation.

May be harmful if swallowed. Causes eye irritation. May cause skin irritation.

Target Organs: None.

Potential Health Effects

Eye: Causes eye irritation.

Skin: May cause skin irritation.

Ingestion: May cause irritation of the digestive tract. May cause systemic toxicity with acidosis. May be harmful if swallowed.

Inhalation: If heated, dust or fume may cause respiratory tract irritation.

Chronic: Prolonged or repeated skin contact may cause dermatitis.

• SECTION 4: First Aid Measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin: Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

Ingestion: Induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water.

Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation: Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician: Treat symptomatically and supportively.

• SECTION 5: Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Substance is noncombustible. Containers may explode in the heat of a fire. May polymerize explosively when involved in a fire.

Extinguishing Media: For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. Substance is noncombustible; use agent most appropriate to extinguish surrounding fire. For large fires, use water spray, fog or alcohol-resistant foam. Cool containers with flooding quantities of water until well after fire is out.

• SECTION 6: Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

• SECTION 7: Handling and Storage

Handling: Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Avoid ingestion and inhalation.

Storage: Store in a cool, dry, well-ventilated area away from incompatible substances. Store below 40°C.

• SECTION 8: Exposure Controls, Personal Protection

Engineering Controls: Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Ammonium chloride	10 mg/m ³ TWA; 20 mg/m ³ STEL	10 mg/m ³ TWA	none listed

OSHA Vacated PELs: Ammonium chloride: 10 mg/m³ TWA; 20 mg/m³ STEL

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear impervious gloves.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

SECTION 9: Physical and Chemical Properties

Physical State: Solid

Appearance: colorless or white

Odor: odorless

pH: 5.0 (10% sol at 25C)

Vapor Pressure: 1 mm Hg @ 160.4C

Vapor Density: Not available.

Evaporation Rate: Negligible.

Viscosity: Not available.

Boiling Point: 520 deg C(sublimes)

Freezing/Melting Point: 328 deg C

Autoignition Temperature: Not available.

Flash Point: Not available.

Decomposition Temperature: Not available.

NFPA Rating: (estimated) Health: 1; Flammability: 0; Reactivity: 0

Explosion Limits, Lower: Not available.

Upper: Not available.

Solubility: 39.6% at 176F.

Specific Gravity/Density: 1.53 (Water=1)

تاریخ: _____
شماره: _____
پیوست: _____

Molecular Formula: NH_4Cl

Molecular Weight: 53.4877

• SECTION 10: Stability and Reactivity

Chemical Stability: Stable at room temperature in closed containers under normal storage and handling conditions.

Conditions to Avoid: Incompatible materials, excess heat.

Incompatibilities with Other Materials: Acids, alkalis, and their associated carbonates. Substance reacts with lead and silver salts to form a fulminating compound. Substance reacts with ammonium compounds, bromine pentafluoride, bromine trifluoride, hydrogen cyanide, iodine heptafluoride, nitrates, and potassium chlorate.

Hazardous Decomposition Products: Irritating and toxic fumes and gases, ammonia and hydrochloric acid fumes.
Hazardous Polymerization: May occur.

• SECTION 11: Toxicological Information

RTECS#:

CAS# 12125-02-9; BP4550000

LD50/LC50:

Draize test, rabbit, eye: 500 mg/24H Mild;

Draize test, rabbit, eye: 100 mg Severe;

Oral, mouse: LD50 = 1300 mg/kg;

Oral, rat: LD50 = 1650 mg/kg;

Carcinogenicity: CAS# 12125-02-9: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

Epidemiology: No information available.

Teratogenicity: No information available.

Reproductive Effects: No information available.

Neurotoxicity: No information available.

Mutagenicity: Cytogenetic analysis: hamster fibroblast, 400 mg/L.

Other Studies: None.

• SECTION 12: Ecological Information

Ecotoxicity: Fish: LC50 = 109.0 mg/L; 48 Hr.; Static conditions Sunfish (fresh water) TLm=6 ppm/96H

Environmental: No information reported.

Physical: No information available.

Other: None.

• SECTION 13: Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

• Section 14: Transport info

Do not work with this material next to incompatible materials. Avoid generating dust. Use appropriate tools to open containers containing this substance. Transportation of solids should be carried out by tools and equipment that are anti-corrosive. When this material is not used or the container containing it is empty, keep the lid of the container closed.

• SECTION 15: Regulatory Information

TSCA

CAS# 12125-02-9 is listed on the TSCA inventory.

Health & Safety Reporting List: None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules: None of the chemicals in this product are under a Chemical Test Rule.

Section 12b: None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

Section 302 (TPQ): None of the chemicals in this product have a TPQ.

تاریخ: _____
شماره: _____
پیوست: _____

SARA Codes: CAS # 12125-02-9: acute, chronic.

Section 313: No chemicals are reportable under Section 313.

Clean Air Act: his material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depleters. This material does not contain any Class 2 Ozone depleters.

Clean Water Act: CAS# 12125-02-9 is listed as a Hazardous Substance under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA: None of the chemicals in this product are considered highly hazardous by OSHA.

STATE: CAS# 12125-02-9 can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives Hazard Symbols: XN

Risk Phrases:

R 22 Harmful if swallowed.

R 36 Irritating to eyes.

Safety Phrases: S 22 Do not breathe dust.