



MATERIAL SAFETY DATA SHEET
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MSDS #1020
DATE: 01/22/03
Supersedes MSDS
1020 03/01/02

SECTION I - PRODUCT IDENTIFICATION

Trade Name: Superprill™, Prilled Ammonium Nitrate, Industrial Grade

Chemical Name: Ammonium Nitrate, NH₄NO₃

Synonyms: Prilled Ammonium Nitrate; Ammonium Nitrate: Explosive, Fertilizer, or Industrial Grade; AN

Product Appearance & Odor: White, solid prills or fine granules. Slight odor.

DOT Hazard Shipping Description: Ammonium Nitrate Fertilizers 5.1 UN2067 III
or
Ammonium Nitrate 5.1 UN1942 III

Label: Oxidizer

NFPA Hazard Classification:	Health (Blue) = 1 Flammability (Red) = 1 Reactivity (Yellow) = 3 Specific Hazard (White) = Oxidizer	HMIS Classification:	Health 1 Flammability 1 Reactivity 3 PPE E
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SECTION II - HAZARDOUS INGREDIENTS

Ingredients:	CAS#	% (Range)	ACGIH-TLV	OSHA-PEL
Ammonium Nitrate	6484-52-2	98 – 100%	Not Established	Not Established
Total Dust			10 mg/m ³	15 mg/m ³
Respirable Dust			3 mg/m ³	5 mg/m ³

Ingredients, other than those mentioned above, as used in this product are not hazardous as defined under current Department of Labor regulations.

SECTION III - PHYSICAL DATA

Boiling Point: Decomposes at 210°C (410°F)

Vapor Pressure: Not Applicable

Vapor Density: Not Applicable

Density: 0.72 - 0.84 g/cc (Poured bulk density)

Percent Volatile by Volume: Not Applicable

Solubility in Water: 192 g/100 ml @ 20°C

Evaporation Rate (Butyl Acetate = 1): Not Applicable **Melting Point:** 170°C (337°F)

SECTION IV - FIRE AND EXPLOSION HAZARD DATA**Flash Point:** Not Applicable**Flammable Limits:** Not Applicable**Extinguishing Media:** Water

Special Fire Fighting Procedures: Fight only small fires in initial stages when not confined. In advanced stage, or for any large fire or fire engulfing confining containers, abandon fire-fighting efforts and quickly evacuate personnel to a safe distance of at least 2,500 feet. Use large quantities of water to cool. If possible, plug drains or dike channels to prevent either molten material or water runoff from entering storm drains or surface waters. Minimize confinement, providing as much ventilation as possible. If yellow or brown gas/vapors are present, wear self-contained breathing apparatus.

Unusual Fire and Explosion Hazards: May explode or detonate under confinement and high temperatures. Emits toxic vapors when heated to decomposition. Explodes more readily if contaminated with organic materials or other fuels.

SECTION V - HEALTH HAZARD DATA**Effects of Overexposure**

Not found to be toxic by oral, dermal and inhalation exposure as defined by OSHA.

Eyes: May cause irritation, redness, tearing or blurred vision.

Skin: Prolonged contact may cause irritation or rash.

Ingestion: Large amounts may be harmful if swallowed. Can cause abdominal spasms, nausea and pain.

Inhalation: May cause dizziness, nausea or intestinal upset and may aggravate lung conditions.

Systemic or Other Effects: Decomposition of ammonium nitrate at high temperatures produces highly toxic Nitrogen Oxides (NO_x). Chronic exposure to NO_x can produce respiratory and/or kidney damage.

Emergency and First Aid Procedures

Eyes: Irrigate with running water for at least fifteen minutes. If irritation persists, seek medical attention.

Skin: Remove contaminated clothing. Wash with soap and water.

Ingestion: Seek medical attention.

Inhalation: Remove to fresh air, seek medical attention.

Special Considerations: If an exposure to toxic NO_x vapors occurs, restore or support breathing as necessary, seek medical attention. Observe for delayed reactions to NO_x exposure that may involve pulmonary edema.

SECTION VI - REACTIVITY DATA

Stability: Stable under normal conditions. May explode when subjected to fire, supersonic shock or high-energy projectile impact, especially when confined or in large quantities.

Conditions to Avoid: Keep away from heat, flame, ignition sources and strong shock.

Materials to Avoid (Incompatibility): Flammable liquids, organic materials, metal powders, explosives and other combustible materials. Corrosives (strong acids and strong bases).

Hazardous Decomposition Products: Nitrogen Oxides (NO_x), Ammonia (NH₃), Nitric Acid (HNO₃).

Hazardous Polymerization: Does not occur.

SECTION VII - SPILL OR LEAK PROCEDURES

Steps to be taken in Case Material is Released or Spilled: Protect from all ignition sources. In case of large fire or fire engulfing containers, evacuate an area not less than 2,500 feet in all directions. If possible, plug drains or dike channels to prevent either molten material or water runoff from entering storm drains or surface water. Notify authorities in accordance with emergency response procedures. Only personnel trained in emergency response should respond. If no fire danger is present, and product is undamaged and/or uncontaminated, repackage product in original packaging or other clean DOT approved container. Ensure that a complete account of product has been made and is verified. Follow applicable federal, state, and local spill reporting requirements. Contact of this product with water may result in a reportable release.

Waste Disposal Method: Disposal must comply with Federal, State and local regulations. Ammonium Nitrate is used as a fertilizer and, in some cases, recovered material may be put to beneficial use. If product becomes a waste, it is potentially regulated as a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR, part 261. Review disposal requirements with a person knowledgeable with applicable environmental law (RCRA) before disposing of any hazardous material.

SECTION VIII - SPECIAL PROTECTION INFORMATION

Ventilation: Not required for normal handling.

Respiratory Protection: Wear NIOSH approved respirator when airborne exposure limits for nuisance dust are exceeded. Refer to OSHA standard 1910.134 for proper selection and use of respirators.

Protective Clothing: Wear long sleeved clothing and protective gloves to prevent prolonged and repeated skin contact.

Eye Protection: Safety glasses with side shields are recommended. Eye baths should be provided when direct eye contact is likely.

Other Precautions Required: None.

SECTION IX - SPECIAL PRECAUTIONS

Precautions to be Taken in Handling and Storage: Store in cool, dry, non-combustible buildings and avoid contamination. Automatic sprinklers are appropriate. Keep separate from other chemicals and combustible materials. Refer to applicable fire and building codes.

Other Precautions: Drains in storage area should be plugged to prevent entry of molten material during fire conditions.

SECTION X - SPECIAL INFORMATION

The reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR 372 may become applicable if the physical state of this product is changed to an aqueous solution. If an aqueous solution of this product is manufactured, processed, or otherwise used, the nitrate compounds category and ammonia listing of the previously referenced regulation should be reviewed.

Slightly toxic to aquatic organisms as defined by USEPA.

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