



Columbus Chemical Industries, Inc./ N4335 Temkin Rd./ Columbus, Wisconsin 53925 /414-623-2140

MATERIAL SAFETY DATA SHEET

AMMONIUM CHLORIDE

PAGE 1

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MSDS#:

PREPARED BY: MAM
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SECTION I - PRODUCT INFORMATION

TRADE NAME: AMMONIUM CHLORIDE
CHEMICAL NAME SYNONYMS: Sal Ammoniac

C.A.S. REGISTRY #: 12125-02-9
CHEMICAL FAMILY: Ammonium Salt

FORMULA: NH₄Cl

DOT PROPER SHIPPING NAME: AMMONIUM CHLORIDE

D.O.T. HAZARD CLASS: ORM E

D.O.T. IDENTIFICATION #: NA9085 D.O.T. LABEL: N.A.

SECTION II - HAZARDOUS INGREDIENTS

INGREDIENT	PERCENT	TLV LEVEL	PEL LEVEL
Ammonium Chloride (fume)	100%	10 mg/m ³	10 mg/m ³

SECTION III - PHYSICAL DATA

BOILING POINT (DEG. F): 968
FREEZING POINT (DEG.F): 644 (Melt)
VAPOR PRESSURE (MM HG): N.A.
VAPOR DENSITY (AIR=1) : N.A.
SOLUBILITY IN WATER: ~27%

SPECIFIC GRAVITY: 1.53-1.56
PERCENT VOLATILE
BY VOLUME%: N.A
EVAPORATION RATE(N.A.): N.A.

APPEARANCE AND ODOR: White, crystalline solid. No odor.

SECTION IV - FIRE EXPLOSION HAZARD DATA

FLASH POINT (METHOD USED): None.

FLAMMABLE LIMITS LEL: N.A. UEL: N.A.

EXTINGUISHING MEDIA: For fires in area use appropriate media. For example: Water spray. Dry Chemical. Carbon Dioxide. Alcohol Foam.

SPECIAL FIRE FIGHTING PROCEDURES: Evacuate area of unprotected personnel. Wear protective clothing including a NIOSH-Approved self-contained breathing apparatus.

UNUSUAL FIRE EXPLOSION HAZARDS: Heat can cause evolution of gaseous Hydrogen Chloride. Thermal decomposition releases toxic oxides of Nitrogen. Heat causes decomposition to release Ammonia. 16% to 25% Ammonia in air mixtures are flammable.

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: 10 mg/m³-TWA; 20 mg/m³-STEL (OSHA 29 CFR 1910.2-1-A)
10 mg/m³-TWA; 20 mg/m³-STEL (ACGIH 1988-89)

EFFECTS OF OVEREXPOSURE

EYE CONTACT: May irritate or burn eyes.

SKIN CONTACT: May cause mild irritation to skin. May cause dermatitis.

INHALATION: Inhalation causes coughing and irritation of nose, throat, and mucous membranes.

INGESTION: Ingestion can cause very serious damage to the mouth, esophagus, stomach, and other tissues with which contact is made, and may be fatal.

OTHER: ROUTES OF EXPOSURE: Product can affect the body if it is inhaled, comes in contact with the eyes or skin, or is swallowed.

EMERGENCY AND FIRST AID PROCEDURES

EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes. Hold eyelids open during this flushing with water. Call a physician immediately.

SKIN CONTACT: Flush area with water while removing contaminated clothing and shoes. Follow by washing with soap and water. Do not reuse clothing or shoes until cleaned. If irritation persists, get medical attention.

INGESTION: If conscious, drink a quart of water. DO NOT induce vomiting. CALL A PHYSICIAN immediately. If unconscious or in convulsions, take immediately to a hospital or a physician. NEVER induce vomiting or give anything by mouth to an unconscious victim.

INHALATION: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. CALL A PHYSICIAN.