


SAL Ammonium

PRODUCT SAFETY DATA SHEET

AMMONIUM CHLORIDE

A. GENERAL INFORMATION

TRADE NAME (COMMON NAME) Ammonium Chloride (Sal Ammoniac)		<input checked="" type="checkbox"/> C.A.S. NO. <input type="checkbox"/> GENERAL PRODUCT CODE # 12125-02-9	
CHEMICAL NAME AND/OR SYNONYM Ammonium Chloride		Distributed by HUBBARD-HALL INC.	
FORMULA NH ₄ Cl		Waterbury, CT 06725 203 754-2171 Inman, SC 29349 203 472-9031 Lincoln, RI 02865 401 333-6189 Agawam, MA 01001 413 729-4833	MOLECULAR WEIGHT 53.49
ADDRESS (No., STREET, CITY, STATE AND ZIP CODE) GENERAL CHEMICAL CORPORATION 90 East Halsey Road Parsippany, N.J. 07054			
CONTACT Manager of Product Safety	PHONE NUMBER (201) 515-1840	LAST ISSUE DATE October, 1989	CURRENT ISSUE DATE February, 1994

B. FIRST AID MEASURES

EMERGENCY PHONE NUMBER (800) 631-8050	
<p>SKIN: Wash with plenty of water.</p> <p>EYES: Flush promptly with plenty of water for at least 15 minutes and get medical attention.</p> <p>INGESTION: Drink large amounts of water to dilute the material. Do not induce vomiting. Get medical attention for irritation, ingestion or discomfort from inhalation.</p> <p style="text-align: right;"><i>OK to ship UPS.</i> <i>NOT DOT Regulated</i></p>	

C. HAZARDS INFORMATION

HEALTH	
INHALATION	Inhalation of product dust may irritate nose, throat and lungs.
INGESTION	Although low in toxicity, ingestion can be harmful - consult a physician. May irritate mouth, esophagus, stomach, etc. LD ₅₀ (rat): 1650 mg/kg. Reference (a).
SKIN	May cause skin irritation, especially under prolonged contact.
EYES	May irritate or burn eyes.
PERMISSIBLE CONCENTRATION: AIR (SEE SECTION J)	OSHA / ACGIH / TLV: 10 mg (as NH ₄ Cl Fume)/m ³
UNUSUAL CHRONIC TOXICITY	None known.

C. HAZARDS (Cont.)**FIRE AND EXPLOSION**

FLASH POINT Not Flammable <input type="checkbox"/> OPEN CUP <input type="checkbox"/> CLOSED CUP	° C	AUTO IGNITION TEMPERATURE NA	° C	FLAMMABLE LIMITS IN AIR (% BY VOL.) NA
UNUSUAL FIRE AND EXPLOSION HAZARDS Decomposes at 340° C to form toxic and corrosive ammonia and hydrogen chloride gases.				

D. PRECAUTIONS PROCEDURES

FIRE EXTINGUISHING AGENTS RECOMMENDED Any agent suitable for surrounding fire.
FIRE EXTINGUISHING AGENTS TO AVOID None known.
SPECIAL FIRE FIGHTING PRECAUTIONS Wear NIOSH-approved self-contained breathing apparatus with full facepiece as toxic gases may be present.
VENTILATION Local exhaust if dusty condition prevails or if TLV is exceeded.
NORMAL HANDLING Avoid eye contact or prolonged skin contact. Avoid breathing dust or fumes.
STORAGE Store in a cool, dry, well-ventilated area away from acids, alkalis, nitrites and nitrates.
SPILL OR LEAK (ALWAYS WEAR PERSONAL PROTECTIVE EQUIPMENT - SECTION E) Shovel up dry chemical into an empty container with a cover. Flush residue with plenty of water. (See Section I for disposal methods).
SPECIAL PRECAUTIONS/PROCEDURES/LABEL INSTRUCTIONS SIGNAL WORD - CAUTION!

E. PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY PROTECTION Where required, use a respirator approved by NIOSH for product dusts, mists or vapors, as applicable.
EYES AND FACE Wear hard hat (or other head covering) and chemical safety goggles. Do not wear contact lenses.
HANDS, ARMS, AND BODY Wear long-sleeve shirt and trousers and gloves for routine product use. Cotton gloves are sufficient for dry product; wear impervious gloves when handling solutions.
OTHER CLOTHING AND EQUIPMENT Provide eyewash and shower stations convenient to the workplace.

F. PHYSICAL DATA

MATERIAL IS (AT NORMAL CONDITIONS): <input type="checkbox"/> LIQUID <input checked="" type="checkbox"/> SOLID <input type="checkbox"/> GAS <input type="checkbox"/> _____		APPEARANCE AND ODOR White crystals. - Odorless.	
BOILING POINT °C Decomposes (approx.) 340 °C MELTING POINT °C	SPECIFIC GRAVITY (H ₂ O = 1) 1.529	VAPOR DENSITY (AIR = 1) NA	
SOLUBILITY IN WATER (% by Weight) 27% at 20°C	pH 1% solution; pH = 5.5	VAPOR PRESSURE (mm Hg at 20°C) <input type="checkbox"/> (PSIG) <input type="checkbox"/> NA	
EVAPORATION RATE (Butyl Acetate = 1) <input type="checkbox"/> (Ether = 1) <input type="checkbox"/> NA	% VOLATILES BY VOLUME (At 20°C) NA		

G. REACTIVITY DATA

STABILITY <input type="checkbox"/> UNSTABLE <input checked="" type="checkbox"/> STABLE	CONDITIONS TO AVOID Stable unless heated - decomposes to release ammonia and hydrogen chloride gases.
INCOMPATIBILITY (MATERIALS TO AVOID) Alkalies - ammonia is released. Acids - hydrogen chloride is released. Nitrites - potentially explosive combinations may be formed.	
HAZARDOUS DECOMPOSITION PRODUCTS Ammonia and hydrogen chloride (hydrochloric acid) gases.	
HAZARDOUS POLYMERIZATION <input type="checkbox"/> MAY OCCUR <input checked="" type="checkbox"/> WILL NOT OCCUR	CONDITIONS TO AVOID

H. HAZARDOUS INGREDIENTS (Mixtures Only)

MATERIAL OR COMPONENT / C.A.S. #	WT. %	HAZARD DATA (SEE SECT. J)
Ammonium Chloride / 12125-02-9	99+	Refer to Section C

I. ENVIRONMENTAL

DEGRADABILITY/AQUATIC TOXICITY 6ppm/96hr/sunfish TLm/fresh water		OCTANOL/WATER PARTITION COEFFICIENT Unknown
EPA HAZARDOUS SUBSTANCES (CLEAN WATER ACT SEC. 311)	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	IF SO REPORTABLE QUANTITY: 5000 #
WASTE DISPOSAL METHODS (DISPOSER MUST COMPLY WITH FEDERAL, STATE AND LOCAL DISPOSAL OR DISCHARGE LAWS) Users should review their operations in terms of any applicable federal, state and local laws and regulations, then consult with appropriate regulatory agencies before discharging or disposing of waste material. If regulations permit, waste may be disposed of by burial in an approved chemical wastes landfill or removed by a licensed waste disposal contractor.		
RCRA STATUS OF UNUSED MATERIAL IF DISCARDED Not a hazardous waste.	HAZARDOUS WASTE NUMBER: (IF APPLICABLE)	40 CFR 116-117 40 CFR 261

J. REFERENCES

PERMISSIBLE CONCENTRATION REFERENCES "Threshold Limit Values for Chemical Substances...", ACGIH, 1993-94 OSHA "Z" List (21 CFR 1910.1000)		
REGULATORY STANDARDS	D.O.T. CLASSIFICATION: (Non-Bulk) Not Regulated	49 CFR
GENERAL (a) "Registry of Toxic Effects of Chemical Substances," NIOSH, U.S. Dept. HHS, 1979.		

K. ADDITIONAL INFORMATION

This product is not for food or drug use, unless the material is labeled "food grade" or "NF Grade" as appropriate.

PSDS FILE NO. - GC 5005

THIS PRODUCT SAFETY DATA SHEET IS OFFERED SOLELY FOR YOUR INFORMATION, CONSIDERATION AND INVESTIGATION.

GENERAL CHEMICAL CORPORATION PROVIDES NO WARRANTIES, EITHER EXPRESS OR IMPLIED, AND ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OR COMPLETENESS OF THE DATA CONTAINED HEREIN.