

A5724 -04  
EFFECTIVE: 09/07/89

AMMONIUM CHLORIDE

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ISSUED: 09/20/89

J.T.BAKER INC., 222 RED SCHOOL LANE, PHILLIPSBURG, NJ 08865

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SECTION I - PRODUCT IDENTIFICATION  
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PRODUCT NAME: AMMONIUM CHLORIDE  
COMMON SYNONYMS: SAL AMMONIAC  
CHEMICAL FAMILY: AMMONIUM SALTS  
FORMULA: NH<sub>4</sub>CL  
FORMULA WT.: 53.49  
CAS NO.: 12125-02-9  
NIOSH/RTECS NO.: BP4550000  
PRODUCT USE: LABORATORY REAGENT  
PRODUCT CODES: 0667,0666,0660

=====  
PRECAUTIONARY LABELING  
=====

BAKER SAF-T-DATA\* SYSTEM

HEALTH	-	1	SLIGHT
FLAMMABILITY	-	0	NONE
REACTIVITY	-	0	NONE
CONTACT	-	1	SLIGHT

LABORATORY PROTECTIVE EQUIPMENT

GOGGLES; LAB COAT

U.S. PRECAUTIONARY LABELING

CAUTION

MAY CAUSE IRRITATION. MAY BE HARMFUL IF SWALLOWED.  
DURING USE AVOID CONTACT WITH EYES, SKIN, CLOTHING. WASH THOROUGHLY AFTER  
HANDLING. WHEN NOT IN USE KEEP IN TIGHTLY CLOSED CONTAINER.

INTERNATIONAL LABELING

HARMFUL IF SWALLOWED. IRRITATING TO EYES.  
DO NOT BREATHE DUST. AFTER CONTACT WITH SKIN, WASH IMMEDIATELY WITH PLENTY OF  
SOAP AND WATER.

SAF-T-DATA\* STORAGE COLOR CODE: ORANGE (GENERAL STORAGE)

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SECTION II - COMPONENTS  
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COMPONENT	CAS NO.	WEIGHT %	OSHA/PEL	ACGIH/TLV
AMMONIUM CHLORIDE	12125-02-9	99-100	10 MG/M3	10 MG/M3

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SECTION III - PHYSICAL DATA  
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BOILING POINT: N/A VAPOR PRESSURE (MMHG): N/A  
MELTING POINT: 338 C (640 F) VAPOR DENSITY (AIR=1): N/A  
(AT 760 MM HG)  
SPECIFIC GRAVITY: 1.53 EVAPORATION RATE: N/A  
(H2O=1)  
SOLUBILITY(H2O): APPRECIABLE (>10%) % VOLATILES BY VOLUME: 0  
(21 C)

PH: N/A

ODOR THRESHOLD (P.P.M.): N/A PHYSICAL STATE: SOLID

COEFFICIENT WATER/OIL DISTRIBUTION: N/A

APPEARANCE & ODOR: WHITE CRYSTALS OR GRANULES. ODORLESS.

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SECTION IV - FIRE AND EXPLOSION HAZARD DATA  
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FLASH POINT (CLOSED CUP): N/A NFPA 704M RATING: 1-0-0

AUTOIGNITION TEMPERATURE: N/A

FLAMMABLE LIMITS: UPPER - N/A LOWER - N/A

FIRE EXTINGUISHING MEDIA  
USE EXTINGUISHING MEDIA APPROPRIATE FOR SURROUNDING FIRE.

SPECIAL FIRE-FIGHTING PROCEDURES  
FIREFIGHTERS SHOULD WEAR PROPER PROTECTIVE EQUIPMENT AND SELF-CONTAINED  
BREATHING APPARATUS WITH FULL FACEPIECE OPERATED IN POSITIVE PRESSURE  
MODE.

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SECTION IV - FIRE AND EXPLOSION HAZARD DATA (CONTINUED)  
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UNUSUAL FIRE & EXPLOSION HAZARDS  
NONE IDENTIFIED.

TOXIC GASES PRODUCED  
AMMONIA, HYDROGEN CHLORIDE

EXPLOSION DATA-SENSITIVITY TO MECHANICAL IMPACT  
NONE IDENTIFIED.

EXPLOSION DATA-SENSITIVITY TO STATIC DISCHARGE  
NONE IDENTIFIED.

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SECTION V - HEALTH HAZARD DATA  
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THRESHOLD LIMIT VALUE (TLV/TWA): 10 MG/M3

SHORT-TERM EXPOSURE LIMIT (STEL): 20 MG/M3

PERMISSIBLE EXPOSURE LIMIT (PEL): 10 MG/M3

TOXICITY OF COMPONENTS

ORAL RAT LD50 FOR AMMONIUM CHLORIDE 1650 MG/KG  
INTRAPERITONEAL MOUSE LD50 FOR AMMONIUM CHLORIDE 485 MG/KG  
CARCINOGENICITY: NTP: NO IARC: NO Z LIST: NO OSHA REG: NO

CARCINOGENICITY  
NONE IDENTIFIED.

REPRODUCTIVE EFFECTS  
NONE IDENTIFIED.

EFFECTS OF OVEREXPOSURE

INHALATION: IRRITATION OF UPPER RESPIRATORY TRACT

SKIN CONTACT: IRRITATION, PROLONGED CONTACT MAY CAUSE DERMATITIS

EYE CONTACT: IRRITATION

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CHEMTREC # (800) 424-9300 -- NATIONAL RESPONSE CENTER # (800) 424-8802

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SECTION V - HEALTH HAZARD DATA (CONTINUED)

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SKIN ABSORPTION: NONE IDENTIFIED

INGESTION: NAUSEA, VOMITING, IRRITATION AND BURNS TO MOUTH AND STOMACH

CHRONIC EFFECTS: NONE IDENTIFIED

TARGET ORGANS  
NONE IDENTIFIED

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE  
NONE IDENTIFIED

PRIMARY ROUTES OF ENTRY  
INHALATION, INGESTION, SKIN CONTACT, EYE CONTACT

EMERGENCY AND FIRST AID PROCEDURES

INGESTION: IF SWALLOWED AND THE PERSON IS CONSCIOUS, IMMEDIATELY GIVE LARGE AMOUNTS OF WATER. GET MEDICAL ATTENTION.

INHALATION: IF A PERSON BREATHES IN LARGE AMOUNTS, MOVE THE EXPOSED PERSON TO FRESH AIR.

SKIN CONTACT: IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH PLENTY OF SOAP AND WATER FOR AT LEAST 15 MINUTES.

EYE CONTACT: IN CASE OF EYE CONTACT, IMMEDIATELY FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES.

SARA/TITLE III HAZARD CATEGORIES AND LISTS

ACUTE: YES CHRONIC: YES FLAMMABILITY: NO PRESSURE: NO REACTIVITY: NO

EXTREMELY HAZARDOUS SUBSTANCE: NO  
CERCLA HAZARDOUS SUBSTANCE: YES CONTAINS AMMONIUM CHLORIDE (RQ = 5000 LBS)  
TOXIC CHEMICALS: NO  
TSCA INVENTORY: YES

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SECTION VI - REACTIVITY DATA  
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STABILITY: STABLE HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

CONDITIONS TO AVOID: MOISTURE, HEAT

INCOMPATIBLES: STRONG OXIDIZING AGENTS, STRONG ACIDS, STRONG BASES,  
MOST COMMON METALS, BROMINE TRIFLUORIDE AND  
TRICHLORIDE, SILVER AND SILVER COMPOUNDS

DECOMPOSITION PRODUCTS: AMMONIA, HYDROGEN CHLORIDE

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SECTION VII - SPILL & DISPOSAL PROCEDURES  
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STEPS TO BE TAKEN IN THE EVENT OF A SPILL OR DISCHARGE  
WEAR SUITABLE PROTECTIVE CLOTHING. CAREFULLY SWEEP UP AND REMOVE.

SPOSAL PROCEDURE  
DISPOSE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL  
ENVIRONMENTAL REGULATIONS.

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SECTION VIII - INDUSTRIAL PROTECTIVE EQUIPMENT  
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VENTILATION: USE GENERAL OR LOCAL EXHAUST VENTILATION TO MEET TLV  
REQUIREMENTS.

RESPIRATORY PROTECTION: NONE REQUIRED WHERE ADEQUATE VENTILATION CONDITIONS  
EXIST. IF AIRBORNE CONCENTRATION EXCEEDS TLV, A  
DUST/MIST RESPIRATOR IS RECOMMENDED. IF CONCENTRATION  
EXCEEDS CAPACITY OF RESPIRATOR, A SELF-CONTAINED  
BREATHING APPARATUS IS ADVISED.

EYE/SKIN PROTECTION: SAFETY GOGGLES, RUBBER GLOVES ARE RECOMMENDED.

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SECTION IX - STORAGE AND HANDLING PRECAUTIONS  
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SECTION IX - STORAGE AND HANDLING PRECAUTIONS (CONTINUED)  
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STORAGE REQUIREMENTS

KEEP CONTAINER TIGHTLY CLOSED. SUITABLE FOR ANY GENERAL CHEMICAL STORAGE AREA. ISOLATE FROM INCOMPATIBLE MATERIALS.

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SECTION X - TRANSPORTATION DATA AND ADDITIONAL INFORMATION  
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DOMESTIC (D.O.T.)

PROPER SHIPPING NAME: AMMONIUM CHLORIDE  
HAZARD CLASS: ORM-E  
UN/NA: NA9085 REPORTABLE QUANTITY: 5000 LBS.  
LABELS: NONE  
REGULATORY REFERENCES: 49CFR 172.101; 173.500; 173.510

INTERNATIONAL (I.M.O.)

PROPER SHIPPING NAME: CHEMICALS, N.O.S. (NON-REGULATED)  
MARINE POLLUTANTS: NO

AIR (I.C.A.O.)

PROPER SHIPPING NAME: CHEMICALS, N.O.S. (NON-REGULATED)

U.S. CUSTOMS HARMONIZATION NUMBER: 28271000005

=====  
N/A = NOT APPLICABLE OR NOT AVAILABLE  
N/E = NOT ESTABLISHED  
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THE INFORMATION IN THIS MATERIAL SAFETY DATA SHEET MEETS THE REQUIREMENTS OF THE UNITED STATES OCCUPATIONAL SAFETY AND HEALTH ACT AND REGULATIONS PROMULGATED THEREUNDER (29 CFR 1910.1200 ET. SEQ.) AND THE CANADIAN WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM. THIS DOCUMENT IS INTENDED ONLY AS A GUIDE TO THE APPROPRIATE PRECAUTIONARY HANDLING OF THE MATERIAL BY A PERSON TRAINED IN, OR SUPERVISED BY A PERSON TRAINED IN, CHEMICAL HANDLING. THE USER IS RESPONSIBLE FOR DETERMINING THE PRECAUTIONS AND DANGERS OF THIS CHEMICAL FOR HIS OR HER PARTICULAR APPLICATION. DEPENDING ON USAGE, PROTECTIVE CLOTHING INCLUDING EYE AND FACE GUARDS AND RESPIRATORS MUST BE USED TO AVOID CONTACT WITH MATERIAL BREATHING CHEMICAL VAPORS/FUMES.

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EXPOSURE TO THIS PRODUCT MAY HAVE SERIOUS ADVERSE HEALTH EFFECTS. THIS CHEMICAL MAY INTERACT WITH OTHER SUBSTANCES. SINCE THE POTENTIAL USES ARE SO VARIED, BAKER CANNOT WARN OF ALL OF THE POTENTIAL DANGERS OF USE OR INTERACTION WITH OTHER CHEMICALS OR MATERIALS. BAKER WARRANTS THAT THE CHEMICAL MEETS THE SPECIFICATIONS SET FORTH ON THE LABEL. BAKER DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR PURPOSE. THE USER SHOULD RECOGNIZE THAT THIS PRODUCT CAN CAUSE SEVERE INJURY AND EVEN DEATH, ESPECIALLY IF IMPROPERLY HANDLED OR THE KNOWN DANGERS OF USE ARE NOT HEDED. READ ALL PRECAUTIONARY INFORMATION. AS NEW DOCUMENTED GENERAL SAFETY INFORMATION BECOMES AVAILABLE, BAKER WILL PERIODICALLY REVISE THIS MATERIAL SAFETY DATA SHEET. IF YOU HAVE ANY QUESTIONS, PLEASE CALL CUSTOMER SERVICE (1-800-JTBAKER) FOR ASSISTANCE.

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