DPM 950-21

Local Office
Torrance: (213) 328-6383

FED. STD. NO. 313

MATERIAL SAFETY DATA SHEET

Form Approved
Bureau Budget No. 45-R0338

SECTION I

MANUFACTURER'S NAME AND FSCM (Federal Supply Code for Manufacturers): Jones Chemicals, Inc.

EMERGENCY PHONE NO.: (716)-538-2311

ADDRESS (Number, Street, City, State, and Zip Code): 100 Sunny Sol Blvd., Caledonia, New York, 14423

CHEMICAL NAME AND SYNONYMS: Ammonium Hydroxide

TRADE NAME AND SYNONYMS: Aqua Ammonia 26° Be

CHEMICAL FAMILY: Alkali

FORMULA: NH_4OH

FEDERAL STOCK NUMBER (FSN):

GROSS WEIGHT (LBS):

OUTSIDE PACKAGE DIMENSIONS (Inches):

MIL-STD-1341/NATIONAL FIRE PROTECTION ASSOCIATION STD 704M SIGNAL

FLAMMABILITY 2 HEALTH 0 REACTIVITY 0 SPECIFIC HAZARD --

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, AND SOLVENTS	%	THRESHOLD LIMIT VALUE (Units)	ALLOYS AND METALLIC COATINGS	%	THRESHOLD LIMIT VALUE (Units)
PIGMENTS		NA	BASE METAL		NA
CATALYST		NA	ALLOYS		NA
VEHICLE		NA	METALLIC COATINGS		NA
SOLVENTS		NA	FILLER METAL PLUS COATING OR CORE FLUX		NA
ADDITIVES		NA	OTHERS		NA
OTHERS		NA			

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, or GASES	%	THRESHOLD LIMIT VALUE (Units)
anhydrous ammonia gas dissolved in water *29.4	*	NH_3 gas 50 ppm

RECEIVED JUL 2 1985 OCCUPATIONAL SAFETY

SECTION III PHYSICAL DATA

BOILING POINT (°F)		SPECIFIC GRAVITY (H_2O = 1)	.8974
VAPOR PRESSURE (mmHg.)	unknown	PERCENT VOLATILE BY VOLUME (%)	100
VAPOR DENSITY (AIR=1)	.597	EVAPORATION RATE (water = 1)	>1
SOLUBILITY IN WATER	infinite		

APPEARANCE AND ODOR: Clear, colorless liquid - pungent odor.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method Used)	FLAMMABLE LIMITS	LOWER EXPLOSIVE LIMIT	UPPER EXPLOSIVE UNIT
Gas 140°F closed cup		Gas - 16%	25%

EXTINGUISHING MEDIA: Water fog

SPECIAL FIRE FIGHTING PROCEDURES: Vapor very dangerous - proper protection from gas must be used. U.S. Bureau of Mines approved self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Fire can only be caused by ignition of ammonia gas and air mixture.

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FIGURE 8

SECTION V HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE
Gas - 50 ppm

EFFECTS OF OVEREXPOSURE
Severe eye damage. Weeping, coughing, headache, dizziness, nausea, chill, dermatitis, possible death.

EMERGENCY AND FIRST AID PROCEDURES
Skin - produces skin burns - wash with water - call physician.
Eyes - flush with water - call physician.
Inhalation - remove from exposure. If unconscious oxygen can be administered by authorized person - call physician.

SECTION VI REACTIVITY DATA

STABILITY			CONDITIONS TO AVOID
	UNSTABLE		
	STABLE	X	

INCOMPATABILITY (Materials to Avoid)
Avoid contact with oxygen, mercury, copper, copper alloys, acids, alluminum alloys, galvanized surfaces.

HAZARDOUS DECOMPOSITION PRODUCTS
NH_3 vapor

HAZARDOUS POLYMERIZATION			CONDITIONS TO AVOID
	MAY OCCUR		Heating liquid to form explosive mixture of
	WILL NOT OCCUR	X	ammonia in air.

SECTION VII SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
Flush with large quantities of water, keep vapor to minimum with water fog.

WASTE DISPOSAL METHOD
Flush to sewer with large quantities of water.

SECTION VIII SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type) U.S.B.M. approved self-contained breathing apparatus - for low concentrations 3% U.S.B.M. approved gas mask with appropriate canister.

VENTILATION	LOCAL EXHAUST	SPECIAL
Yes	Yes - locate at ceiling leading upwards.	
	MECHANICAL (General)	OTHER

PROTECTIVE GLOVES Liquid proof rubber gloves.

EYE PROTECTION
Gas tight chemical goggles.

OTHER PROTECTIVE EQUIPMENT
Cotton clothing - in heavy concentrations wear complete gas suit.

SECTION IX SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
Keep away from sun & heat, do not use copper-nickel alloys.
Use proper personal protective equipment.

OTHER PRECAUTIONS

SECTION X TRANS. DATA

PROPER SHIPPING (Article) NAME Aqua Ammonia solution containing anhydrous ammonia

DOT CLASSIFICATION
Corrosive material

DOT LABEL	DOT MARKING	EMERGENCY ACCIDENT PRECAUTIONS AND PROCEDURES
corrosive		MCA CHEM CARD 66

DOT PLACARD	PRECAUTIONS TO BE TAKEN IN TRANSPORTATION
corrosive	

2/21/89

Called: Ordered new MSDS
Jones Chemical (716) 538-2311

Spoke with MSDS clerk.
He indicated that current
MSDS for Aqua Ammonia
reads:
Health Hazards:
Inhalation: irritation of
mucous membranes of the
respiratory tract.
Skin: may severely injure
upon contact
Eye: severely irritating from
liquid and mild irritation
from vapors
Ingestion: Corrosive to
digestive tract.

Johnnie Smith