

SCIENCE KIT & BOREAL LABORATORIES -- AMMONIUM HYDROXIDE SOLUTION -- 6810-01-031-5513

===== Product Identification =====

Product ID:AMMONIUM HYDROXIDE SOLUTION
MSDS Date:01/12/1987
FSC:6810
NIIN:01-031-5513
MSDS Number: BXPVQ
=== Responsible Party ===
Company Name:SCIENCE KIT & BOREAL LABORATORIES
Address:777 EAST PARK DRIVE
City:TONAWANDA
State:NY
ZIP:14150-6784
Country:US
Info Phone Num:716-874-6020 FAX: 716-874-9572
Emergency Phone Num:800-828-7777
Preparer's Name:ALEXANDER PICCIRILLI
CAGE:57020
=== Contractor Identification ===
Company Name:SCIENCE KIT INC
Address:777 E PARK DR
Box:City:TONAWANDA
State:NY
ZIP:14150-6708
Country:US
Phone:716-874-6020
CAGE:57020

===== Composition/Information on Ingredients =====

Ingred Name:AMMONIA (SARA 302/313) (CERCLA) (DISSOLVED IN WATER TO FORM AMMONIUM HYDROXIDE)
CAS:7664-41-7
RTECS #:BO0875000
Fraction by Wt: 29%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:50 PPM
ACGIH TLV:25 PPM/35 STEL; 9495
EPA Rpt Qty:100 LBS
DOT Rpt Qty:100 LBS

Ingred Name:WATER
CAS:7732-18-5
RTECS #:ZC0110000
Fraction by Wt: 71%
Other REC Limits:NONE RECOMMENDED

===== Hazards Identification =====

LD50 LC50 Mixture:ORAL LD50 (RAT) IS 350 MG/KG
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:CAUSES SEVERE IRRITATION OR BURNS TO EYES, SKIN AND MUCOUS MEMBRANES; HIGHLY TOXIC BY ORAL AND

INHALATION ROUTES. INHALATION OF AMMONIA GAS CAUSES EDEMA, SPASM, AND ASPHYXIA. CHRONIC: NONE SPECIFIED BY MANUFACTURER.
Explanation of Carcinogenicity:NO INGREDIENT OF A CONCENTRATION OF 0.1% OR GREATER IS LISTED AS A CARCINOGEN OR SUSPECTED CARCINOGEN.
Effects of Overexposure:INHALED-EDEMA, SPASM, ASPHYXIA. EYES-PAIN, BURNING, TEARS. SKIN-BURNS, REDNESS, PAIN. INGESTED-PAIN, BURNS TO MOUTH & THROAT, STOMACH PAIN, NAUSEA, VOMITING.
Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

===== First Aid Measures =====

First Aid:SKIN-FLOOD WITH WATER, THEN WASH WITH VINEGAR. EYES-FLUSH WITH LOTS OF WATER FOR AT LEAST 15 MINUTES. GET IMMEDIATE MEDICAL ATTENTION. INHALED-REMOVE TO FRESH AIR. RESTORE BREATHING IF REQUIRED. GET MEDICAL ATTENTION. INGESTED-IF CONSCIOUS,GIVE LOTS OF WATER. FOLLOW WITH FRUIT JUICE AND VEGETABLE OIL. GET PROMPT MEDICAL ATTENTION.

===== Fire Fighting Measures =====

Flash Point:NON-FLAMMABLE
Lower Limits:16
Upper Limits:25
Extinguishing Media:USE ANY MEDIA APPROPRIATE FOR SURROUNDING FIRE.
Fire Fighting Procedures:WEAR SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE GEAR. COOL FIRE EXPOSED CONTAINERS WITH WATER.
Unusual Fire/Explosion Hazard:WHEN HEATED,EMITS TOXIC FUMES.AMMONIUM HYDROXIDE IS NON-COMBUSTIBLE & NON-EXPLOSIVE;BUT AMMONIA VAPORS RELEASED FROM SOLUTION CAN FORM AN EXPLOSIVE MIXTURE.

===== Accidental Release Measures =====

Spill Release Procedures:WEARING PROTECTIVE EQUIPMENT, CAREFULLY NEUTRALIZE WITH SODIUM BISULFATE AND FLUSH TO SEWER WITH COPIOUS AMOUNTS OF WATER. NOTE: DISCHARGE, TREATMENT OR DISPOSAL MAY BE SUBJECT TO LOCAL, STATE AND/OR FEDERAL REGULATIONS.
Neutralizing Agent:SODIUM BISULFATE.

===== Handling and Storage =====

Handling and Storage Precautions:STORE IN A COOL, DRY AREA AWAY FROM ACIDS AND ACID FUMES OR OXIDIZING AGENTS. KEEP CONTAINER TIGHTLY CLOSED WHEN NOT IN USE.
Other Precautions:READ LABEL ON CONTAINER BEFORE USING. FOR LABORATORY USE ONLY. NOT FOR FOOD, DRUG OR HOUSEHOLD USE. KEEP OUT OF REACH OF CHILDREN.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:IF ENGINEERING CONTROLS FAIL OR NON-ROUTINE USE OR AN EMERGENCY OCCURS; WEAR AN MSHA/NIOSH APPROVED RESPIRATOR OR AN AIR-SUPPLIED RESPIRATOR OR SCBA, AS REQUIRED. USE IN ACCORDANCE WITH 29 CFR 1910.134 AND MANUFACTURER'S RECOMMENDATIONS.
Ventilation:USE ADEQUATE MECHANICAL VENTILATION OR LOCAL EXHAUST TO MAINTAIN EXPOSURE BELOW TLV(S).
Protective Gloves:RUBBER.
Eye Protection:SAFETY GLASSES/CHEMICAL SPLASH GOGGLES.

Other Protective Equipment:GOGGLES, FACESHIELD, LAB COAT, APRON,
VENTILATION HOOD, EYE WASH STATION.
Work Hygienic Practices:WASH HANDS AFTER HANDLING AND BEFORE EATING,
DRINKING, OR SMOKING. LAUNDRY CONTAMINATED CLOTHES BEFORE REUSE.
Supplemental Safety and Health
PER DLSC-TIR NSN CANCELLED WITHOUT REPLACEMENT 91274; HOWEVER,
SAMMS-CTDF DOES NOT!!?? HAVE SUCH A STATEMENT-CTDF HAS FULL DATA ON
NSN.

===== Physical/Chemical Properties =====

HCC:B1
Boiling Pt:B.P. Text:212F,100C
Melt/Freeze Pt:M.P/F.P Text:-107F,-77C
Vapor Pres:584 MM HG
Vapor Density:<1
Spec Gravity:0.896-0.902
Evaporation Rate & Reference:>1 (ETHER=1)
Solubility in Water:COMPLETE
Appearance and Odor:WATER, WHITE LIQUID; STRONG PUNGENT AMMONIA ODOR.
Percent Volatiles by Volume:100

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES
ACIDS, ACROLEIN, DIMETHYL SULFATE, HALOGENS, SILVER NITRATE, SILVER
PERMANGANATE.
Stability Condition to Avoid:WHEN HEATED, EMITS TOXIC FUMES.
Hazardous Decomposition Products:AMMONIA FUMES.
Conditions to Avoid Polymerization:WILL NOT OCCUR.

===== Disposal Considerations =====

Waste Disposal Methods:WEARING PROPER PROTECTIVE CLOTHING, CAREFULLY
NEUTRALIZE WITH SODIUM BISULFATE AND FLUSH TO SEWER WITH COPIOUS
AMOUNTS OF WATER. DISCHARGE, TREATMENT OR DISPOSAL MAY BE SUBJECT
TO LOCAL, STATE AND/OR FEDERAL REGULATIONS.

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