

POLY RESEARCH CORPORATION -- AMMONIUM HYDROXIDE,ZINC OXIDE -- 6810-01-386-5562
===== Product Identification =====

Product ID:AMMONIUM HYDROXIDE,ZINC OXIDE
MSDS Date:04/05/1993
FSC:6810
NIIN:01-386-5562
MSDS Number: CCVVN
=== Responsible Party ===
Company Name:POLY RESEARCH CORPORATION
Address:125 CORPORATE DRIVE
City:HOLTSVILLE
State:NY
ZIP:11742
Country:US
Info Phone Num:516-758-0460
Emergency P
hone Num:516-758-0460
Chemtrec Ind/Phone:(800)424-9300
CAGE:64713

=== Contractor Identification ===
Company Name:POLY RESEARCH CORPORATION
Address:125 CORPORATE DRIVE
Box:City:HOLTSVILLE
State:NY
ZIP:11742-2007
Country:US
Phone:516-758-0460
CAGE:64713
Company Name:POLY SCIENTIFIC R&D CORP.
Address:70 CLEVELAND AVE
Box:City:BAY SHORE
State:NY
ZIP:11706
Country:US
Phone:516-586-0400
CAGE:67458

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

Ingred Name:AMMONIUM HYDROXIDE (CE

RCLA)
CAS:1336-21-6
RTECS #:BQ9625000
Fraction by Wt: 28 - 30%
Other REC Limits:NONE RECOMMENDED
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

Ingred Name:ZINC OXIDE (SARA 313) (CERCLA)
CAS:1314-13-2
RTECS #:ZH4810000
Other REC Limits:NONE RECOMMENDED
OSHA PEL:15 MG/M3 TDUST
ACGIH TLV:10 MG/M3 TDUST; 9596

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

LD50 LC50 Mixture:LD50 (ORAL RAT) 350 MG/KG (RTECS, NH3)

Routes of Entry: Inhalation:YES Skin:NO Ingestion:YES

Reports of

Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:TARGET ORGANS:EYES, SKIN, RESPIRATORY & GI TRACTS. ACUTE- CORROSIVE. MAY CAUSE SEVERE EYE IRRITATION, EYE DAMAGE, BLINDNESS. CONTACT WITH SKIN MAY CAUSE SEVERE IRRITATION/BURNS. INHALATION MAY CAUSE SEVERE IRRITATION/BURNS OF RESPIRATORY SYSTEM, LUNG INFLAMMATION. INGESTION MAY BE FATAL. CAUSES BURNS. CHRONIC- UNKNOWN.

Explanation of Carcinogenicity:NONE

Effects of Overexposure:SEVERE IRRITATION, SEVERE BURNS, TEARING,

SEVERE COUGHING, DESTRUCTION OF TISSUE ON ANY EXPOSED PART OF THE BODY, CHEST PAIN, NAUSEA, VOMITING, DIFFICULT BREATHING, DEATH, BLINDNESS

Medical Cond Aggravated by Exposure:PRE-EXISTING EYE DISORDERS, SKIN DISORDERS OR IMPAIRED RESPIRATORY FUNCTION MAY BE MORE SUSCEPTIBLE TO THE EFFECTS OF THIS MATERIAL.

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

First Aid:GET MEDICAL ATTENTION IMMEDIATELY. SKIN:FLUSH WITH WATER, THEN WASH

WITH SOAP & WATER. EYE:FLUSH WITH WATER FOR 15 MINUTES.
HOLD EYELIDS OPEN. INHALED:REMOVE TO FRESH AIR. PROVIDE OXYGEN/CPR
IF NEEDED . ORAL:IF CONSCIOUS, DRINK LARGE AMOUNT OF WATER FOLLOWED
BY LEMON JUICE, ORANGE JUICE, EGG WHITE, VEGETABLE OIL. DO NOT
INDUCE VOMITING. IF VOMITING OCCURS SPONTANEOUSLY, KEEP HEAD BELOW
HIPS.

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

Flash Point:NONE
Lower Limits:NOT RELEVANT
Upper Limits:NOT RELEVANT
Extinguishing
Media:WATER SPRAY. USE WATER SPRAY TO COOL FIRE EXPOSED
CONTAINERS.
Fire Fighting Procedures:WEAR FIRE FIGHTING PROTECTIVE EQUIPMENT AND A
NIOSH-APPROVED FULL FACED SELF CONTAINED BREATHING APPARATUS.
Unusual Fire/Explosion Hazard:AMMONIUM HYDROXIDE IS NON-COMBUSTIBLE AND
NON-EXPLOSIVE, BUT AMMONIA VAPORS RELEASED FROM SOLUTION CAN FORM
EXPLOSIVE MIXTURE WITH AIR IN CONFINED AREAS.

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

Spill Release Procedures:VEN
TILATE AREA. WEAR PROTECTIVE CLOTHING AND
SCBA. RECOVER IF POSSIBLE. NEUTRALIZE WITH DILUTE HCL/SODIUM
BISULFATE. FLUSH TO SEWER WITH LARGE AMOUNT OF WATER, IF PERMITTED.
OTHERWISE, ABSORB WITH SAND. TRANSFER TO A SUITABLE CONTAINER
FOR DISPOS
Neutralizing Agent:DILUTE ACETIC ACID, HCL, H2SO4, SODIUM BISULFATE

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

Handling and Storage Precautions:STORE IN COOL, WELL-VENTILATED AREA
AWAY FROM INCOMPATIBLE MATERI
ALS. STORE IN A CORROSIVE PROOF AREA,
BELOW 25C/77F.
Other Precautions:AVOID CONTACT WITH EITHER LIQUID OR VAPORS.
CONTAINERS SHOULD BE KEPT WELL SEALED WHEN NOT IN USE. MATERIAL MAY
ATTACK ZN, CU, HG, SN AND THEIR ALLOYS. KEEP OUT OF REACH OF
CHILDREN. FOR LABORATORY USE ONLY. DO NOT BREATHE VAPORS.

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

Respiratory Protection:WORK IN FUME HOOD OR WEAR A NIOSH-APPROVED
RESPIRATOR WITH AMMONIA CANISTER, IF NEED

ED.

Ventilation:USE GENERAL OR LOCAL EXHAUST VENTILATION TO KEEP FUME OR VAPOR LEVELS AS LOW AS POSSIBLE.

Protective Gloves:RUBBER

Eye Protection:CHEMICAL GOGGLES AND FACE SHIELD

Other Protective Equipment:USE RUBBER SPLASH APRON. SAFETY SHOWER AND EYEWASH FOUNTAIN SHOULD BE LOCATED NEARBY.

Work Hygienic Practices:OBSERVE GOOD INDUSTRIAL HYGIENE PRACTICES AND RECOMMENDED PROCEDURES. WASH THOROUGHLY BEFORE EATING AND AFTER HANDLING.

Supplemental Safety and Health

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== Physical/Chemical Properties =====

HCC:B1

NRC/State Lic Num:NOT RELEVANT

Boiling Pt:=28.3C, 83.F

Melt/Freeze Pt:=-77.8C, -108.F

Vapor Pres:720 @ 80F

Vapor Density:1.2

Spec Gravity:0.90

pH:ALKALI

Solubility in Water:MISCIBLE

Appearance and Odor:LIQUID WITH STRONG ACRID SUFFOCATING ODOR

Percent Volatiles by Volume:100

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

Stability Indicator/Materials to Avoid:YES

STRONG ACIDS, STRONG OXIDIZING AGENTS, FOOD PRODUCTIONS, DIMETHYL SULFATE, BRASS, BRONZ

Stability Condition to Avoid:EXCESSIVE HEAT

Hazardous Decomposition Products:AMMONIA GAS AND NITROGEN OXIDES MAY BE FORMED.

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

Waste Disposal Methods:DISPOE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. CAREFULLY NEUTRALIZE WITH SODIUM BISULFATE AND FLUSH TO SEWER WITH LARGE AMOUNT OF WATER, IF PERMITTED.

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