

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
Phone Num:516-758-0460
Chemtec 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 (

CERCLA)
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, SE
VERE 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 WA

SH 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

Extinguishi

ng 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:V

ENTILATE 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 MATE

RIALS. 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 NE

EDED.

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 PROD

UCTS, 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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ng agencies):

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