

# MATERIAL SAFETY DATA SHEET

For R&D use only. Not for drug, household or other uses.

Click <http://www.lookchem.com/cas-293/29320-38-5.html> for suppliers of this product.

## Composition/Information on Ingredient

**Cas:**  
29320-38-5  
**Code:**  
M  
**RTECS:**  
  
**Code:**  
X  
**Name:**  
POLYETHYLENE POLYAMINES (1,2-DICHLOROETHANE POLYM  
**Other REC Limits:**  
N/K  
**OSHA PEL:**  
N/K  
**Code:**  
M  
**OSHA STEL:**  
  
**Code:**  
  
**ACGIH TLV:**  
N/K  
**Code:**  
M  
**ACGIHSTEL:**  
N/P  
**Code:**

## Control Measures

**Respiratory Protection:**  
USE AN APPROVED FULL-FACE AIR-PURIFYING RESPIRATOR.  
**Ventilation:**  
4 PROVIDE ADEQUATE LOCAL EXHAUST VENTILATION TO KEEP  
**Protective Gloves:**  
IMPERVIOUS  
**Eye Protection:**  
FACESHIELD, CHEMICAL GOGGLES  
**Other Protective Equipment:**  
Equipment BOOTS, APRON, FULL-BODY SUIT, SAFETY SHOWER, EYE WASH FOUNTAIN  
**Work Hygienic Practices:**  
REMOVE & LAUNDRER CONTAMINATED CLOTHING BEFORE REUSE. DESTROY SHOES/OTHER LEATHER ITEMS WHICH CANT BE DECONTAMINATED.  
**Supplemental Safety and Health:**  
N/K

## Health Hazards Data

**LD50LC50Mixture:**  
ORAL LD50(RAT): 2140-3990 MG/KG  
**Route Of Entry Inds - Inhalation:**  
YES  
**Skin:**  
YES  
**Ingestion:**  
NO  
**Carcinogenicity Inds - NTP:**  
NO  
**IARC:**  
NO  
**OSHA:**  
NO  
**Health Hazards Acute And Chronic:**  
EYES: SEVERE IRRITATION W/CORNEAL INJURY, PERMANENT VISION IMPAIRMENT, BLINDNESS. SKIN: ABSORPTION, BURNS, ALLERGIC REACTION. INGESTION: GASTROINTESTINAL IRRITATION, ULCERATION, MOUTH & THROAT BURNS. INHALATION: UPPER RESPIRATORY TRACT SENSITIZATION & IRRITATION. RESULTS OF IN VITRO MUTAGENICITY TESTS POSITIVE.  
**Explanation Of Carcinogenicity:**  
NONE  
**Signs And Symptions Of Overexposure:**  
IRRITATION, BURNS, ULCERATION, SENSITIZATION 3  
**Medical Cond Aggravated By Exposure:**  
ASTHMA  
**First Aid:**  
EYES: WASH W/WATER >30 MINS. SKIN: FLUSH W/WATER >15 MINS. INGESTION: DON'T INDUCE VOMITING. GIVE LARGE AMOUNTS WATER/MILK. INHALATION: MOVE TO FRESH AIR. OBTAIN MEDICAL ATTENTION IN ALL CASES. PHYSIC IAN'S NOTE: MAY CAUSE TISSUE DESTRUCTION LEADING TO STRICTURE. IF LAVAGE IS PERFORMED USE ENDOTRACHEAL/ESOPHAGOSCOPIC CONTROL. IF BURNS TREAT AS THERMO BURN AFTER DECONTAMINATION. NO SPECIFIC ANTIDOTE  
**Spill Release Procedures:**  
WEAR APPROPRIATE PROTECTIVE CLOTHING. LARGE: DIKE & PUMP INTO SUITABLE CONTAINERS. SMALL: DILUTE W/WATER & RECOVER/USE NONCOMBUSTIBLE ABSORBENT MATERIAL/SAND & SHOVEL INTO SUITABLE CONTAINERS. DON'T U SE SAWDUST, WOOD CHIPS/OTHER CELLULOSICMATERIALS.  
**Neutralizing Agent:**  
N/K  
**Waste Disposal Methods:**  
LARGE QUANTITIES COULD BE RECOVERED. INCINERATE IN ACCORDANCE W/FEDERAL, STATE & LOCAL REGULATIONS. DON'T DUMP INTO SEWERS, ON THE GROUND/INTO ANY BODY OF WATER.  
**Handling And Storage Precautions:**  
HOLD BULK STORAGE UNDER NITROGEN BLANKET. COPPER & ALLOYS OF COPPER SHOULD NOT BE USED AS THEY ARE QUICKLY CORRODED BY THE PRODUCT.  
**Other Precautions:**  
GROUND ALL TRANSFER EQUIPMENT.

## Fire and Explosion Hazard Information

**Flash Point Method:**  
PMCC  
**Flash Point:**  
  
**Flash Point Text:**  
350F  
**Autoignition Temp:**  
  
**Autoignition Temp Text:**  
N/A  
**Lower Limits:**  
N/R  
**Upper Limits:**  
N/R  
**Extinguishing Media:**  
WATER FOG, ALCOHOL FOAM, CO2, DRY CHEMICAL  
**Fire Fighting Procedures:**  
USE A POSITIVE-PRESSURE SCBA & FULL PROTECTIVE CLOTHING.  
**Unusual Fire/Explosion Hazard:**  
WILL BURN UNDER THE RIGHT CONDITIONS OF HEAT & OXYGEN SUPPLY. CAN AUTOIGNITE IN AIR AT APPROXIMATELY 572F.

## Physical/Chemical Properties

**HCC:**  
B2  
**NRC/State LIC No:**  
  
**Net Prop WT For Ammo:**  
  
**Boiling Point:**  
>265.C, 509.F  
**B.P. Text:**  
  
**Melt/Freeze Pt:**  
  
**M.P/F.P Text:**  
N/K  
**Decomp Temp:**  
  
**Decomp Text:**  
N/K  
**Vapor Pres:**  
<1  
**Vapor Density:**  
6.53  
**Volatile Org Content %:**  
  
**Spec Gravity:**  
0.989-0.995  
**VOC Pounds/Gallon:**  
  
**PH:** N/K  
**VOC Grams/Liter:**  
  
**Viscosity:**  
N/P  
**Evaporation Rate & Reference:**  
N/K  
**Solubility in Water:**  
COMPLETE  
**Appearance and Odor:**  
AMBER COLORED LIQUID W/AMINE ODOR  
**Percent Volatiles by Volume:**  
N/K  
**Corrosion Rate:**  
N/K

## Reactivity Data

**Stability Indicator:**  
YES  
**Stability Condition To Avoid:**  
EXCESSIVE HEAT  
**Materials To Avoid:**  
ACID, OXIDIZING MATERIAL, HALOGENATED ORGANIC COMPOUNDS, ALDEHYDES, KETONES, ACRYLATES, COPPER & COPPER ALLOYS  
**Hazardous Decomposition Products:**  
NITROGEN OXIDES  
**Hazardous Polymerization Indicator:**  
NO  
**Conditions To Avoid Polymerization:**  
N/K 5

## Toxicological Information

**Information:**N/P

## MSDS Transport Information

**Information:**N/P

## Regulatory Information

**Sara Title III Information:** N/P  
**Federal Regulatory Information:** N/P  
**State Regulatory Information:** N/P

## Other Information

**Other Information:**N/P



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WARRANTY

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