

MATERIAL SAFETY DATA SHEET

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

Click <http://www.lookchem.com/cas-331/3312-60-5.html> for suppliers of this product.

Composition/Information on Ingredient

Cas:
3312-60-5
Code:
M

RTECS:

Code:
X

Name:
1,3-PROPANEDIAMINE, N-CYCLOHEXYL

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 SELF-CONTAINED BREATHING APPARATUS W/PRESSURE DEMAND MODE.

Ventilation:
ADEQUATE GENERAL & LOCAL EXHAUST TO MAINTAIN AIR CONCENTRATIONS IN WORK SPACE

Protective Gloves:
NEOPRENE RUBBER 4

Eye Protection:
SPLASH-PROOF GOGGLES OR FULL FACE-SHIELD

Other Protective Equipment:
Equipment PROTECTIVE LONG-SLEEVED CLOTHING, RUBBER APRON, RUBBER BOOTS, EYE WASH STATION, SAFETY SHOWER

Work Hygienic Practices:
REMOVE/LAUNDER CONTAMINATED CLOTHING BEFORE REUSE. DISCARD CONTAMINATED LEATHER ARTICLES. SEE SUPP

Supplemental Safety and Health:
WASH AT THE END OF EACH WORKSHIFT & BEFORE EATING, SMOKING OR USING THE TOILET.

Health Hazards Data

LD50LC50Mixture:
N/K

Route Of Entry Inds - Inhalation:
YES

Skin:
NO

Ingestion:
YES

Carcinogenicity Inds - NTP:
NO

IARC:
NO

OSHA:
NO

Health Hazards Acute And Chronic:
EYES: LACRIMATION, CONJUNCTIVITIS, CORNEAL EDEMA, SEVERE IRRITATION, PAIN, BURNS, NECROSIS & PERMANENT INJURY. INHALATION: TISSUE DAMAGE & SCARRING, RESPIRATORY EFFECTS, COUGH, TIGHTNESS OF CHEST OR S HORTNESS OF BREATH. INGESTION: VOMITING, DIARRHEA, BLEEDING OF GASTROINTESTINAL TRACT & VOMITING OF BLOOD.

Explanation Of Carcinogenicity:
SEE INGREDIENTS

Signs And Symptions Of Overexposure:
SKIN: DERMATITIS, DEFATTING, RASH, IRRITATION & CORROSION. EYES: CONJUNCTIVITIS & CORNEAL DAMAGE. INGESTION: DEATH.

Medical Cond Aggravated By Exposure:
CHRONIC RESPIRATORY DISEASE SUCH AS BRONCHITIS & EMPHYSEMA. EYE DISEASE, SKIN DISORDERS & ALLERGIES.

First Aid:
EYES: HOLD EYELIDS APART & FLUSH W/PLENTY OF WATER FOR AT LEAST 15 MINS. SKIN: WASH W/SOAP & WATER. INHALATION: REMOVE TO FRESH AIR. KEEP QUIET. START OXYGEN INHALATION THROUGH SUITABLE EQUIPMENT. PRE VENT ASPIRATION OF VOMIT. TURN VICTIM'SHEAD TO THE SIDE. INGESTION: 3 ADMINISTER 3-4 GLASSES OF MILK OR WATER. DON'T INDUCE VOMITING. AVOID ASPIRATION OF VOMIT. OBTAIN MEDICAL ATTENTION IN ALL CASES.

Spill Release Procedures:
TRANSFER TO CONTAINERS BY SUCTION, PREPARATORY FOR LATER DISPOSAL. PLACE IN METAL CONTAINERS FOR RECOVERY OR DISPOSAL. REMOVE FROM SPILL LOCATION. FLUSH AREA W/WATER SPRAY. OPEN ENCLOSED SPACES TO OUT SIDE ATMOSPHERE. WEAR PROTECTIVE EQUIPMENT.

Neutralizing Agent:
SODIUM BISULFITE

Waste Disposal Methods:
DISPOSE OF IN ACCORDANCE W/LOCAL, STATE, & FEDERAL REGULATIONS.

Handling And Storage Precautions:
KEEP IN COOL, DRY, VENTILATED STORAGE & IN CLOSED CONTAINERS. KEEP AWAY FROM ACIDS OR ALKALIS . STORE AWAY FROM IGNITION SOURCES.

Other Precautions:
GROUND ALL CONTAINERS DURING TRANSFER. AVOID CONTACT W/SKIN & EYES. AVOID BREATHING VAPORS. EMPTY CONTAINERS MAY CONTAIN EXPLOSIVE VAPORS. FLUSH EMPTY CONTAINER W/WATER TO REMOVE RESIDUAL FLAMMABLE LI QUID & VAPORS.

Fire and Explosion Hazard Information

Flash Point Method:
PMCC

Flash Point:

Flash Point Text:
261F

Autoignition Temp:

Autoignition Temp Text:
N/A

Lower Limits:
N/K

Upper Limits:
N/K

Extinguishing Media:
DRY CHEMICAL OR ALCOHOL FOAM

Fire Fighting Procedures:
WEAR NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS W/INDEPENDENT AIR SUPPLY. KEEP CONTAINER COOL W/WATER SPRAY. CONTAIN RUNOFF WATER IN DIKES.

Unusual Fire/Explosion Hazard:
USE WATER SPRAY TO REDUCE VAPORS. SUDDEN REACTION & FIRE MAY RESULT IF PRODUCT IS MIXED W/OXIDIZING AGENT.

Physical/Chemical Properties

HCC:

NRC/State LIC No:

Net Prop WT For Ammo:

Boiling Point:

B.P. Text:
N/K

Melt/Freeze Pt:

M.P/F.P Text:
N/K

Decomp Temp:

Decomp Text:
N/K

Vapor Pres:
N/K

Vapor Density:
N/K

Volatile Org Content %:

Spec Gravity:
1.02

VOC Pounds/Gallon:

PH: N/K

VOC Grams/Liter:

Viscosity:
N/P

Evaporation Rate & Reference:
N/K

Solubility in Water:
N/K

Appearance and Odor:
COLORLESS MOBILE LIQUID W/AMMONIACAL ODOR

Percent Volatiles by Volume:
N/K

Corrosion Rate:
N/K

Reactivity Data

Stability Indicator:
YES

Stability Condition To Avoid:
N/K

Materials To Avoid:
MINERAL ACIDS SUCH AS SULFURIC &PHOSPHORIC, OXIDIZING AGENTS SUCH AS PERCHLORATES &NITRATES

Hazardous Decomposition Products:
CO, CO2, NITROGEN OXIDES, TOXIC &IRRITATING GASES

Hazardous Polymerization Indicator:
NO

Conditions To Avoid Polymerization:
N/K

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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