

MATERIAL SAFETY DATA SHEET

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

Click <http://www.lookchem.com/cas-653/6531-38-0.html> for suppliers of this product.

Composition/Information on Ingredient

Cas:

6531-38-0

Code:

M

RTECS:

Code:

X

Name:

N,N-BIS-(2-AMINOETHYL)-PIPERAZINE

Other REC Limits:

NONE RECOMMENDED

OSHA PEL:

NOT ESTABLISHED

Code:

M

OSHA STEL:

Code:

ACGIH TLV:

NOT ESTABLISHED

Code:

M

ACGIH STEL:

N/P

Code:

Control Measures

Respiratory Protection:

IF ENGINEERING CONTROLS DO NOT MAINTAIN AIRBORNE CONCENTRATIONS BELOW TLV, USE NIOSH-APPROVED RESPIRATOR EQUIPPED WITH ORGANIC VAPOR CARTRIDGES MAY BE APPROPRIATE. FOR FIRE/EMERGENCY, USE SELF-CONTAINED BREATHING APPARATUS.

Ventilation:

LOCAL EXHAUST VENTILATION AT THE POINT OF USE.

Protective Gloves:

BUTYL RUBBER, PVC OR NITRILE

Eye Protection:

5 SAFETY GLASSES+SIDE SHIELD/CHEM GOGGLES

Other Protective Equipment:

Equipment USE RUBBER SPLASH APRON AND RUBBER BOOTS. EYEWASH AND SAFETY SHOWER SHOULD BE LOCATED NEARBY.

Work Hygienic Practices:

OBSERVE GOOD INDUSTRIAL HYGIENE PRACTICES AND RECOMMENDED PROCEDURES. WASH THOROUGHLY BEFORE EATING, DRINKING/SMOKING.

Supplemental Safety and Health:

NOTE TO PHYSICIAN: MAY CAUSE TISSUE DESTRUCTION LEADING TO STRICTURE. IF LAVAGE IS PERFORMED, SUGGEST ENDOTRACHEAL AND/OR ESOPHAGOSCOPIC CONTROL. TREAT BURNS AS THERMAL BURNS, AFTER DECONTAMINATION. NO SPECIFIC ANTIDOTE. TREAT SYMPTOMATICALLY AND SUPPORTIVELY. EXCESSIVE EXPOSURE MAY AGGRAVATE PREEXISTING ASTHMA.

Health Hazards Data

LD50/LC50/Mixture:

LD50 (ORAL, RAT) IS 4340 MG/KG.

Route Of Entry Inds - Inhalation:

NO

Skin:

YES

Ingestion:

YES 3

Carcinogenicity Inds - NTP:

NO

IARC:

NO

OSHA:

NO

Health Hazards Acute And Chronic:

TARGET ORGANS:EYES, SKIN, RESPIRATORY & GI TRACTS. ACUTE- CORROSIVE. ORAL: MAY CAUSE MOUTH & THROAT BURNS & ULCERATION. EYE: MAY CAUSE SEVERE IRRITATION, EVEN BLINDNESS. SKIN: MAY CAUSE SEVERE BURNS. MAY BE ABSORBED THROUGH SKIN. INHALE: MAY CAUSE RESPIRATORY SENSITIZATION IN SUSCEPTIBLE PERSONS. CHRONIC- UNKNOWN.

Explanation Of Carcinogenicity:

NONE

Signs And Symptoms Of Overexposure:

SEVERE EYE IRRITATION, PAIN, CORNEAL INJURY, EVEN BLINDNESS; SEVERE SKIN BURNS, ALLERGIC SKIN REACTION; GASTROINTESTINAL IRRITATION OR ULCERATION; THROAT AND MOUTH BURNS, RESPIRATORY IRRITATION OR SENSITIZATION

Medical Cond Aggravated By Exposure:

INDIVIDUALS WITH PRE-EXISTING DISEASES OF THE EYE, SKIN, RESPIRATORY TRACT MAY HAVE INCREASED SUSCEPTIBILITY TO THE TOXICITY OF EXCESSIVE EXPOSURES.

First Aid:

GET MEDICAL HELP IF SYMPTOMS PERSIST. INHALED: REMOVE TO FRESH AIR. PROVIDE CPR/OXYGEN IF NEEDED. EYES: FLUSH WITH WATER FOR 30 MINUTES, HOLDING EYELIDS OPEN. GET MEDICAL ATTENTION. SKIN: FLUSH WITH PLENTY OF WATER FOR 15 MINUTES WHILE REMOVING CONTAMINATED CLOTHING. ORAL: DO NOT INDUCE VOMITING. IF CONSCIOUS, DRINK PLENTY OF WATER OR MILK. GET MEDICAL ATTENTION IMMEDIATELY.

Spill Release Procedures:

WEAR PROPER PROTECTIVE EQUIPMENT. VENTILATE AREA. DO NOT RELEASE INTO SOIL, SEWER, STREAM. S LEAK IF POSSIBLE. ABSORB SPILL WITH VERMICULITE OR SAND. SCRAPE UP OR SHOVEL INTO PROPER CONTAINER FOR LATER DISPOSAL.

Neutralizing Agent:

NOT RELEVANT

Waste Disposal Methods:

CONTACT FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATORS FOR GUIDANCE REGARDING PROPER DISPOSAL. INCINERATION IN AN EPA-APPROVED INCINERATOR IS A PREFERRED DISPOSAL PRACTICE. THIS MATERIAL, AS A WASTE, IS NOT CONSIDERED A RCRA HAZARDOUS WASTE.

Handling And Storage Precautions:

KEEP CONTAINER TIGHTLY CLOSED WHEN NOT IN USE. GROUND ALL TRANSFER EQUIPMENT. HOLD BULK STORAGE UNDER NITROGEN BLANKET. AVOID CONTACT WITH COPPER. 4

Other Precautions:

CORROSIVE. DO NOT GET IN EYES, ON SKIN, ON CLOTHING. AVOID BREATHING VAPORS/MIST. USE WITH ADEQUATE VENTILATION. EMPTY CONTAINERS RETAIN RESIDUE. DO NOT CUT, GRIND, WELD OR DRILL ON OR NEAR THIS CONTAINER. KEEP OUT OF REACH OF CHILDREN.

Fire and Explosion Hazard Information

Flash Point Method:

PMCC

Flash Point:

245F,118C

Autoignition Temp:

561F

Lower Limits:

1.1% @ 365F

Upper Limits:

>6.4% @ 365F

Extinguishing Media:

WATER FOG, CARBON DIOXIDE, ALCOHOL FOAM/DRY CHEMICAL. WATER SPRAY MAY BE USED TO KEEP FIRE EXPOSED CONTAINERS COOL.

Fire Fighting Procedures:

WEAR FULL PROTECTIVE CLOTHING AND NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE OPERATED IN THE POSITIVE PRESSURE MODE.

Unusual Fire/Explosion Hazard:

NONE

Physical/Chemical Properties

HCC:

B2

Not RELEVANT No:

Net Prop WT For Ammo:

N/A

Boiling Point:

482F,250C

Melt / Freeze Pt:

N/A

M.P/F.P Text:

UNKNOWN

Decomp Temp:

UNKNOWN

Decomp Text:

UNKNOWN

Vapor Pres:

<1 @ 60F

Vapor Density:

5.04

Volatile Org Content %:

Volatile Org Content %:

Spec Gravity:

0.973 - 0.981

VOC Pounds/Gallon:

N/A

PH:

N/K

VOC Grams/Liter:

N/A

Viscosity:

UNKNOWN

Evaporation Rate & Reference:

UNKNOWN

Solubility in Water:

MIXES COMPLETELY

Light, Straw-colored:

LIQUID WITH AMINE ODOR

6

Percent Volatiles by Volume:

N/K

Corrosion:

UNKNOWN

Reactivity Data:

CAN AUTOIGNITE IN AIR AT APPROXIMATELY 561F (294C).

Materials To Avoid:

OXIDIZING AGENTS, ACIDS, HALOGENATED ORGANIC COMPOUNDS

Hazardous Decomposition Products:

OXIDES OF NITROGEN, CARBON MONOXIDE, CARBON DIOXIDE MAY BE FORMED.

Hazardous Polymerization Indicator:

NO

Conditions To Avoid Polymerization:

NONE

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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