

MATERIAL SAFETY DATA SHEET

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

Click <http://www.lookchem.com/cas-160/16052-06-5.html> for suppliers of this product.

Composition/Information on Ingredient

Cas:
16052-06-5

Code:
M

RTECS:
TM2649130

Code:
F

Name:
4-(2-HYDROXYETHYL)-1-PIPERAZINEPROPANESULPHONIC A

Other REC Limits:
N/P

OSHA PEL:
N/P

Code:

OSHA STEL:
N/P

Code:

ACGIH TLV:
N/P

Code:
M

ACGIHSTEL:
0.29 MG/M3, C

Code:
T 2

Control Measures

Respiratory Protection:
NOT NECESSARY IF ROOM IS WELL-VENTILATED. THE APPROPRIATE RESPIRATORY PROTECTION SHOULD BE USED IF AIRBORNE CHEMICAL CONCENTRATION EXCEEDS THE EXPOSURE LIMITS LISTED. WEAR NIOSH APPROVED RESPIRATOR AP PROPRIATE FOR EXPOSURE OF CONCERN (FP N).

Ventilation:
N/P

Protective Gloves:
5 NONE REQUIRED. WEAR IMPERVIOUS GLOVES (FP N).

Eye Protection:
ANSI APPROVED CHEMICAL WORKERS GOGGLES (FP N).

Other Protective Equipment:
Equipment EYEWASH DELUGE SHOWER MTG ANSI DESIGN CRITERIA (FP N). BODY PROTECTION NOT NEEDED FOR SMALL QUANTITY USAGE. THE NEED FOR THE APPROPRIATE BODY PROTECTION SHOULD BE DETERMINED ON A CASE BY CASE BASIS.

Work Hygienic Practices:
KEEP AWAY FROM FOODSTUFFS, BEVERAGES AND FEED. WASH HANDS BEFORE BREAKS AND AT THE END OF WORK.

Supplemental Safety and Health:
N/P

Health Hazards Data

LD50LC50Mixture:
3 N/P

Route Of Entry Inds - Inhalation:
YES

Skin:
NO

Ingestion:
NO

Carcinogenicity Inds - NTP:
NO

IARC:
NO

OSHA:
NO

Health Hazards Acute And Chronic:
PRIMARY IRRITANT EFFECT: ON SKIN/ON EYE: NO IRRITANT EFFECT. SENSITIZATION: NO SENSITIZING EFFECTS KNOWN. TARGET ORGANS/SYSTEMS: NOT APPLICABLE.

Explanation Of Carcinogenicity:
THIS PRODUCT DOES NOT CONTAIN CARCINOGENS LISTED BY IARC, NTP, OSHA OR ACGIH.

Signs And Symptions Of Overexposure:
SEE HEALTH HAZARDS.

Medical Cond Aggravated By Exposure:
NONE EXPECTED.

First Aid:
INHAL: REMOVE FROM SOURCE OF EXPOS. IF SIGNS OF TOX OCCUR, SEEK MED ATTN. PROVIDE SYMPTOMATIC/SUPPORTIVE CARE AS NEEDED. SKIN: REMOVE FROM SOURCE OF EXPOS. FLUSH W/COPIOUS AMTS OF WATER. IF IRRIT PERS ISTS/SIGNS OF TOX OCCUR, SEEK MED ATTN. PROVIDE SYMPTOMATIC/SUPPORTIVE CARE AS NEC. EYES: REMOVE FROM SOURCE OF EXPOS. FLUSH W/COPIOUS AMTS OF WATER FOR AT LEAST 15 MINS. IF IRRIT PERSISTS/SIGNS OF TO X OCCUR, SEEK MED ATTN. PROVIDE SYMPTOMATIC/SUPPORTIVE CARE AS NEC. INGEST: REMOVE FROM SOU

Spill Release Procedures:
THE APPROPRIATE NIOSH APPROVED RESPIRATORY PROTECTION SHOULD BE USED IF AIRBORNE CHEMICAL CONCENTRATION EXCEEDS EXPOS LIMITS (IF ANY) LISTED. PREVENT LIQUID AND VAPOR FROM ENTERING INTO SEWAGE SYSTEM, WORKPITS AND CELLARS. ABSORB WITH LIQUID-BINDING MATERIAL (SAND, DIATOMITE, ACID BINDERS, UNIVERSAL BINDERS, SAWDUST). NO DANGEROUS SUBSTANCES ARE RELEASED.

Neutralizing Agent:
N/P

Waste Disposal Methods:
PRODUCT: RECOMMENDATION: DISPOSE IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS. UNCLEANED PACKAGINGS: RECOMMENDATION: DISPOSE IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS. 4

Handling And Storage Precautions:
NO SPECIAL PRECAUTIONS ARE NECESSARY FOR SAFE HANDLING IF USED CORRECTLY. NO SPECIAL MEASURES REQUIRED ABOUT PROTECTION AGAINST EXPLOSIONS AND FIRES. NO SPECIAL REQUIREMENTS TO BE MET BY STOREROOMS AN D RECEPTACLES. DO NOT STORE TOGETHER WITH ACIDS. PROTECT FROM HEAT AND DIRECT SUNLIGHT.

Other Precautions:
STORAGE CLASS: NOT APPLICABLE.

Fire and Explosion Hazard Information

Flash Point Method:

Flash Point:

Flash Point Text:
N/A

Autoignition Temp:

Autoignition Temp Text:
N/P

Lower Limits:

Upper Limits:

Extinguishing Media:
CARBON DIOXIDE, EXTINGUISHING POWDER OR WATER SPRAY. FIGHT LARGER FIRES WITH WATER SPRAY OR ALCOHOL RESISTANT FOAM.

Fire Fighting Procedures:
THE APPROPRIATE NIOSH APPROVED RESPIRATORY PROTECTION SHOULD BE USED IF AIRBORNE CHEMICAL CONCENTRATION EXCEEDS THE EXPOSURE LIMITS (IF ANY) LISTED. WEAR NIOSH APPROVED SCBA AND FULL PROTECTIVE EQUIPM ENT (FP N).

Unusual Fire/Explosion Hazard:
PRODUCT IS NOT SELFIGNITING. PRODUCT DOES NOT PRESENT AN EXPLOSION HAZARD.

Physical/Chemical Properties

HCC:

NRC/State LIC No:

Net Prop WT For Ammo:

Boiling Point:
=100.C, 212.F

B.P. Text:

Melt/Freeze Pt:
=0.C, 32.F

M.P./F.P Text:

Decomp Temp:

Decomp Text:
N/P

Vapor Pres:
23 HPA @ 20C

Vapor Density:
N/K

Volatile Org Content %:

Spec Gravity:
1 G/CM3 @ 20C

VOC Pounds/Gallon:

PH: 7.6 @ 20C

VOC Grams/Liter:

Viscosity:
1 MPAS @ 20C

Evaporation Rate & Reference:
N/P

Solubility in Water:
FULLY MISCIBLE 6

Appearance and Odor:
COLORLESS LIQUID; ODORLESS.

Percent Volatiles by Volume:
N/P

Corrosion Rate:
N/P

Reactivity Data

Stability Indicator:
YES

NO DECOMPOSITION TO AVOID:
NO DECOMPOSITION TO AVOID ACCORDING TO SPECIFICATIONS.

Materials To Avoid:
NO DANGEROUS REACTIONS KNOWN.

Hazardous Decomposition Products:
NO DANGEROUS DECOMPOSITION PRODUCTS KNOWN.

Hazardous Polymerization Indicator:
N/P

Conditions To Avoid Polymerization:
N/P

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