

# MATERIAL SAFETY DATA SHEET

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

Click <http://www.lookchem.com/cas-223/2238-07-5.html> for suppliers of this product.

## Composition/Information on Ingredient

**Cas:**  
2238-07-5  
**Code:**  
M

**RTECS:**  
KN2350000  
**Code:**  
M

**Name:**  
ETHER, BIS(2,3-EPOXYPROPYL); (DIGLYCIDYL ETHER) (

**Other REC Limits:**  
N/K

**OSHA PEL:**  
0.5 PPM  
**Code:**  
M

**OSHA STEL:**

**Code:**

**ACGIH TLV:**  
0.1 PPM  
**Code:**  
M

**ACGIHSTEL:**  
N/P  
**Code:**

## Control Measures

**Respiratory Protection:**  
NOT ORDINARILY REQUIRED. USE NIOSH/MSHA APPROVED RESPIRATOR APPROPRIATE FOR EXPOSURE OF CONCERN (FP N).

**Ventilation:**  
NONE SPECIFIED BY MANUFACTURER.

**Protective Gloves:**  
IMPERVIOUS GLOVES (FP N).

**Eye Protection:**  
ANSI APPRVD CHEM WORKERS GOGGS (ING 20)

**Other Protective Equipment:**  
Equipment ANSI APPRVD EYE WASH &DELUGE SHOWER (FP N). AVOID CNTCT W/EYES. AVOID PRLNGD/RPTD CNTCT W/SKIN. WEAR CLTHG (ING 21)

**Work Hygienic Practices:**  
WASH W/SOAP &WATER BEFORE EATING, DRINKING, SMOKING, APPLYING COSMETICS OR USING TOILET FACILITIES. LAUNDER (ING 22)

**Supplemental Safety and Health:**  
FIRE FIGHT PROC: FIRE EXPOS CNTNRS W/WATER. MATL TO AVOID: PRIMARY & SECONDARY ALIPHATIC AMINES. RXN W/SOME CURING AGENTS MAY PRDCE CONSIDERABLE HEAT. RUNAWAY CURE RXNS MAY CHAR & DECOMPOSE RESIN SYST EM GENERATING UNIDENTIFIED FUMES & VAPSWHICH MAY BE TOXIC.

## Health Hazards Data

**LD50LC50Mixture:**  
LD50:(ORAL,RAT) 11.4 G/KG

**Route Of Entry Inds - Inhalation:**  
YES

**Skin:**  
YES

**Ingestion:**  
YES

**Carcinogenicity Inds - NTP:**  
NO

**IARC:**  
NO

**OSHA:**  
NO

**Health Hazards Acute And Chronic:**  
EYES: PROD IS MOD IRRIT TO EYES. CNTCT W/PROD AT ELEVATED TEMPS CAN RSLT IN THERMAL BURNS. SKIN: PROD IS MOD IRRIT TO SKIN. MAY CAUSE SKIN SENSIT (ALLERGY) EVIDENCED BY RASHES, ESP HIVES. CNTCT W/PROD AT ELEVATED TEMPS CAN RSLT IN THERMAL BURNS. INHAL: BECAUSE OF ITS LOW VOLAT PROD IS NOT LIKELY TO BE (EFTS OF OVEREXP)

**Explanation Of Carcinogenicity:**  
NOT RELEVANT

**Signs And Symptions Of Overexposure:**  
HLTH HAZ: INHAL HAZ. INGEST: CONSIDERED TO HAVE LOW ORDER OF ACUTE ORAL TOX. BOTH EPON RESIN 828 & DGEBPA, COMPONENT OF THIS PROD, HAVE PROVED INACTIVE WHEN TESTED BY IN VIVO MUTAGENICITY ASSAYS. THEY HAVE BOTH SHOWN ACTIVITY BY IN VITRO MICROBIAL MUTAGENICITY SCREENING & HAVE PRDCED CHROMOSOMAL ABBERATIONS IN (ING 4)

**Medical Cond Aggravated By Exposure:**  
PREEXISTING SKIN & EYE DISORDERS MAY BE AGGRAVATED BY EXPOS TO THIS PROD. PREEXISTING SKIN OR LUNG ALLERGIES MAY INCREASE THE CHANCE OF DEVELOPING INCREASED ALLERGY SYMPTOMS FROM EXPOS TO THIS PROD.

**First Aid:**  
EYE: FLUSH EYES W/PLENTY OF WATER FOR AT LEAST 15 MIN WHILE HOLDING EYELIDS OPEN. GET MED ATTN. IF CNTCT W/HOT PROD OCCURS IMMED FLUSH W/COOL WATER FOR AT LEAST 15 MIN. GET MED ATTN IMMED. SKIN: REMOV E CONTAMD CLTHG/SHOES & WIPE EXCESS FROM SKIN. FLUSH SKIN W/WATER. FOLLOW BY WASHING W/SOAP & WATER. IF IRRIT OCCURS, GET MED ATTN. DO NOT REUSE CLTHG UNTIL CLEANED. CONTAMD LEATHER ARTICLES, (ING 6)

**Spill Release Procedures:**  
MAY BURN ALTHOUGH NOT READILY IGNITABLE. USE CAUTIOUS JUDGMENT WHEN CLEANING UP LG SPILLS. LG SPILLS:WEAR NIOSH/MSHA APPRVD RESP & PROT CLTHG AS APPROP. SHUT OFF SOURCE OF LEAK IF SAFE TO DO SO. DIKE & CONTAIN. REMOVE W/VACUUM TRUCKS OR PUMP (ING 12)

**Neutralizing Agent:**  
NONE SPECIFIED BY MANUFACTURER.

**Waste Disposal Methods:**  
DISPOSAL MUST BE IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS (FP N).

**Handling And Storage Precautions:**  
STORE IN A COOL, DRY PLACE. KEEP AWAY FROM OPEN FLAMES & HIGH TEMPERATURES.

**Other Precautions:**  
CNTNRS, EVEN THOSE THAT HAVE BEEN EMPTIED, CAN CONTAIN HAZ PROD RESIDUES. HANDLE I/A/W HAZ POTNTL OF CURING AGENT(S) USED. CAUTION:MAY CAUSE IRRIT. AVOID CNTCT W/EYES. AVOID PRLNGD/RPTD CONTACT W/SKIN . HEATING THIS RESIN ABOVE 300F (ING 14) 7

## Fire and Explosion Hazard Information

**Flash Point Method:**  
PMCC

**Flash Point:**

**Flash Point Text:**  
480F,249C

**Autoignition Temp:**

**Autoignition Temp Text:**  
N/A

**Lower Limits:**  
N/K

**Upper Limits:**  
N/K

**Extinguishing Media:**  
USE WATER FOG, FOAM, DRY CHEMICAL OR CARBON DIOXIDE.

**Fire Fighting Procedures:**  
USE NIOSH/MSHA APPRVD SCBA & FULL PROT EQUIP (FP N) INCL HELMET W/FSHLD, BUNKER COAT, GLOVES & RUB BOOTS). MATL WILL NOT BURN UNLESS PREHEATED. COOL (SUPDAT)

**Unusual Fire/Explosion Hazard:**  
SEE OTHER PRECAUTIONS.

## Physical/Chemical Properties

**HCC:**

**NRC/State LIC No:**  
8

**Net Prop WT For Ammo:**

**Boiling Point:**

**B.P. Text:**  
>500F,>260C

**Melt/Freeze Pt:**

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

**Decomp Temp:**

**Decomp Text:**  
N/K

**Vapor Pres:**  
0.03 @ 77C

**Vapor Density:**  
N/A

**Volatile Org Content %:**

**Spec Gravity:**  
1.17 (H\*20=1)

**VOC Pounds/Gallon:**

**PH:** N/K

**VOC Grams/Liter:**

**Viscosity:**  
N/P

**Evaporation Rate & Reference:**  
N/A

**Solubility in Water:**  
NEGLEGIBLE

**Appearance and Odor:**  
VERY LIGHT YELLOW, VERY VISCOUS LIQUID.

**Percent Volatiles by Volume:**  
N/K

**Corrosion Rate:**  
N/K

## Reactivity Data

**Stability Indicator:**  
YES

**Stability Condition To Avoid:**  
NONE SPECIFIED BY MANUFACTURER.

**Materials To Avoid:**  
CAN REACT VIGOROUSLY W/STRONG OXIDIZING AGENTS, STRONG LEWIS OR MINERAL ACIDS &STRONG MINERAL &ORG BASES/ESP (SUPDAT)

**Hazardous Decomposition Products:**  
CARBON MONOXIDE, ALDEHYDES, ACIDS &OTHER ORG SUBSTANCES MAY BE FORMED DURING COMBUST/ELEVATED (>500F) TEMP DEGRADATION.

**Hazardous Polymerization Indicator:**  
NO

**Conditions To Avoid Polymerization:**  
NOT RELEVANT

## Toxicological Information

**Information:**N/P

## MSDS Transport Information

**Information:**N/P

## Regulatory Information

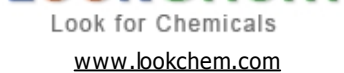
**Sara Title III Information:** N/P

**Federal Regulatory Information:** N/P

**State Regulatory Information:** N/P

## Other Information

**Other Information:**N/P



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WARRANTY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Lookchem shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.