

# 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

**ACGIH STEL:**  
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

**LD50/LC50 Mixture:**  
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 Symptoms Of Overexposure:**

HLTH HAZ: INHAL HAZ. INGEST: CONSIDERED TO HAVE LOW ORDER OF ACUTE ORAL TOX. BOTH EPON RESIN 828 & DGEBA, 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 PRDCE CHROMOSOMAL ABERRATIONS 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 CONTAM 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. CONTAM 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 POTNL 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:**

NO

**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 (H2O=1)

**VOC Pounds/Gallon:**

NO

**PH:**

N/K

**VOC Grams/Liter:**

**Viscosity:**

N/P

**Evaporation Rate & Reference:**

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 POTNL 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

## Reactivity Data

**Stability Indicator:**

NONE SPECIFIED BY MANUFACTURER.

**Materials To Avoid:**

STRONGLY 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:**

N/P