

SHELL OIL COMPANY, PRODUCT SAFETY & COMPLIANCE -- EPON CURING AGENT (R) U --
8040-00-822-6430

===== Product Identification =====

Product ID:EPON CURING AGENT (R) U

MSDS Date:07/13/1989

FSC:8040

NIIN:00-822-6430

MSDS Number: BLKZD

=== Responsible Party ===

Company Name:SHELL OIL COMPANY, PRODUCT SAFETY & COMPLIANCE

Box:4320

City:HOUSTON

State:TX

ZIP:77210

Country:US

Info Phone Num:713-241-4819

Emer

gency Phone Num:713-473-9461/800-424-9300 CHEMTREC

Preparer's Name:J. C. WILLETT

CAGE:SHELL

=== Contractor Identification ===

Company Name:SHELL OIL COMPANY PRODUCT SAFETY AND COMPLIANCE

Address:P.O. BOX 4320

Box:4320

City:HOUSTON

State:TX

ZIP:77210

Phone:713-241-2252 /713-241-4819

CAGE:SHELL

===== Composition/Information on Ingredients =====

Ingred Name:EPOXY RESIN/AMINE ADDUCT

CAS:68610-56-0

Fraction by Wt: 73%

Other REC Limits:NONE SPECIFIED

Ingred Name:DIETHYLENE TRIAMIN

E
CAS:111-40-0
RTECS #:IE1225000
Fraction by Wt: 25%
Other REC Limits:NONE SPECIFIED
OSHA PEL:1 PPM
ACGIH TLV:S, 1 PPM; 9192

Ingred Name:PHENOL
CAS:108-95-2
RTECS #:SJ3325000
Fraction by Wt: 2%
Other REC Limits:NONE SPECIFIED
OSHA PEL:5 PPM SKIN
ACGIH TLV:5 PPM SKIN
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

===== Hazards Identification =====

LD50 LC50 Mixture:ACUTE ORAL LD50: 530 MG/KG (RAT); ACUTE*

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES

Hea

lth Hazards Acute and Chronic:EYE: CORROSIVE. SEVERE DAMAGE-INCLDG
BLINDNESS; TEMP VISION DISTURBANCE & PERM CORNEAL INJURY. SKIN:
TOXIC & FATAL IF EVEN MODERATE AMTS ARE ABSORBED. CORROSIVE.
SENSITIZER. INHALE: NOSE, THROAT, RSPR TRY TRACT IRRIT. INFLAMM.
INHALE/INGEST: MAY BE FATAL. LIVER, KIDNEY, HEART DAMAGE. CNS
DEPRESS. RESPIRATORY ARREST.

Explanation of Carcinogenicity:*DERMAL LD50: 1.09 ML/KG (RABBIT) & 850
MG/KG (RABBIT)

Effects of Overexposure:SKIN SENSIT-RASHES

, HIVES. LUNG SENSIT-WHEEZING

W/SHORTNESS OF BREATH & COUGH. KIDNEY DAMAGE-CHANGES IN URINE
OUTPUT, URING APPEARANCE OR EDEMA. LIVER DAMAGE-LOSS OF APPETITE,
JAUNDICE, PAIN IN UPPER ABDOMEN ON RIGHT SIDE. EARLY TO MODERATE
CNS DEPRESS-GIDDINESS, HEADACHE, DIZZINESS, NAUSEA. POSS
UNCONSCIOUS, DEATH. **

Medical Cond Aggravated by Exposure:PREEXISTING EYE, SKIN & RESPIRATORY
DISORDERS. SKIN OR LUNG ALLERGIES MAY INCREASE THE CHANCE OF
DEVELOPING INCREASED ALLERGY SYMPTO

MS. IMPAIRED KIDNEY, LIVER &
HEART FUNCTIONS.

===== First Aid Measures =====

First Aid:EYE: IMMED FLUSH W/WTR-15 MIN.-HOLD EYELIDS OPEN. RINSE
W/WATER ON WAY TO MED AID. SKIN: IMMED REMOVE CONTAM CLOTH/SHOES.
WIPE EXCESS FROM SKIN & FLUSH W/WATER-15 MIN. WASH W/SOAP & WATER.
GET MED AID . INHALE: REMOVE TO FRESH AIR. BREATHING DIFFICULT,
GIVE OXYGEN. GIVE CPR IF NOT BREATHING. GET MED AID. INGEST: DO NOT
INDUCE VOMIT. GIVE 1 GLASS H
20 UNLESS DROWSY, CONVULSING, UNCONSC.
GET MED AID.

===== Fire Fighting Measures =====

Flash Point Method:SCC
Flash Point:>200F,>93C
Extinguishing Media:USE WATER FOG, "ALCOHOL" FOAM, DRY CHEMICAL OR CO2.
Fire Fighting Procedures:MAT'L WILL NOT BURN UNLESS PREHEATED. DO NOT
ENTER CONFINED FIRE SPACE W/O FULL BUNKER GEAR, INCLDG POS PRESS
NIOSH APPR'D SCBA. COOL FIRE EXPOSED CNTNRS W/WTR.
Unusual Fire/Explosion Hazard:DETA AND PHENOL VAPORS MAY BE R
ELEASED
UNDER FIRE CONDITIONS AND NITROGEN OXIDES AND NITROGEN CONTAINING
ORGANIC COMPOUNDS MAY BE PRODUCED UPON COMBUSTION.

===== Accidental Release Measures =====

Spill Release Procedures:USE CAUTION WHEN CLEANING UP SPILLS. WEAR
RSPRTR & PROTECT CLOTH AS APPROP. SHUT OFF LEAK SOURCE IF SAFE.
DIKE/CONTAIN. REMOVE W/VACUUM TRUCKS OR PUMP TO STORAGE/SALVAGE
VESS. SOAK UP W/ABSORB. PROPER LY DISPOSE. FLUSH AREA W/WATER TO
REMOVE RESIDUE.

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===== Handling and Storage =====

Handling and Storage Precautions:KEEP OUT OF SURFACE WATERS, SEWERS,
WATERWAYS. DANGER! CORROSIVE. STORE IN COOL, DRY PLACE W/ADEQUATE
VENT. KEEP FROM OPEN FLAMES & HIGH TEMPERATURES.
Other Precautions:SENSITIZER. CONTAINERS, EVEN THOSE THAT HAVE BEEN
EMPTIED, CAN CONTAIN HZDS PRODUCT RESIDUES. MINIMIZE CONTACT
W/MATERIAL. LAUNDER CONTAM CLOTH BEFORE REUSE. CONTAM LEATHER
ARTICLES, INCLD SHOES, CANN OT BE DECONT

AM & SHOULD BE DESTROYED.

===== Exposure Controls/Personal Protection =====

Respiratory Protection: AVOID BREATHING VAPOR/MIST. IF EXPOS MAY OR DOES EXCEED OCCUPATIONAL EXPOS LIM, USE NIOSH-APPR'D RSPRTR TO PREVENT OVEREXPOS. IN ACCORD W/29 CFR 1910.134, USE EITHER FULL-FACE, ATMOSPHERE-SUPPLYING RS PRTR OR AIR-PURIFYING FOR ORGANIC VAPOR.

Ventilation: USE VENT AS REQUIRED TO CONTROL VAPOR CONC. EYE WASH FOUNTAINS AND SAFETY SHOWERS SHOULD BE AVAILABLE FOR EMERG ENCY USE.

Protective Gloves: WEAR CHEMICAL RESISTANT GLOVES.

Eye Protection: WEAR CHEMICAL GOGGLES.

Other Protective Equipment: WEAR PROTECTIVE CLOTHING.

Work Hygienic Practices: WASH W/SOAP & WATER BEFORE EATING, DRINKING, SMOKING, APPLYING COSMETICS, USING TOILET FACILITIES.

Supplemental Safety and Health

**INGESTION OF PRODUCT MAY PRODUCE SEVERE BURNS OF MOUTH & THROAT & GASTROINTESTINAL IRRITATION. BLADDER DAMAGE, SKIN DEPIGMENTATION & CARDIAC ARREST MAY OCCUR. THERE WAS EVIDENCE FOR EMBRYO AND FETOT OXIC EFFECTS IN RATS AND TERATOGENIC EFFECTS IN MICE.

===== Physical/Chemical Properties =====

Vapor Pres: 1

Spec Gravity: 1.1

Solubility in Water: MISCIBLE

Appearance and Odor: LIGHT YELLOW LIQUID, AMMONIACAL ODOR.

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid: YES

CAN REACT WITH STRONG OXIDIZING AGENTS AND STRONG LEWIS OR MINERAL ACIDS.

Hazardous Decomposition Products: NITROGEN OXI

DES, CARBON MONOXIDE AND

UNIDENTIFIED ORGANIC COMPOUNDS MAY BE FORMED DURING COMBUSTION.

===== Disposal Considerations =====

Waste Disposal Methods: PLACE IN APPROP DISPOSAL FACILITY PER LOCAL REGS. NOTIFY AUTHORITIES IF ANY EXPOS TO GENERAL PUBLIC OR ENVIRONMENT OCCURS OR IS LIKELY TO OCCUR. REPORT SPILLS INTO OR LEADING TO SURFACES WATERS THAT CAUSE A SHEEN TO NAT'L RESPONSE CTR, 800-424-8802.

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