

SHELL CHEMICAL COMPANY A DIV. OF SHELL OIL CO. -- EPON CURING AGENT (R) U --  
8010-01-060-7176

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

Product ID:EPON CURING AGENT (R) U

MSDS Date:11/03/1988

FSC:8010

NIIN:01-060-7176

Kit Part:Y

MSDS Number: BQDNX

=== Responsible Party ===

Company Name:SHELL CHEMICAL COMPANY A DIV. OF SHELL OIL CO.

Address:1 SHELL PLAZA

Box:2463

City:HOUSTON

State:TX

ZIP:77001

Country:US

Info Phone Num:713-241-4819

Emergency Phone Num:713-473-9461

Preparer's Name:J C WILLETT

CAGE:86961

=== Contractor Identification ===

Company Name:SHELL CHEMICAL COMPANY A DIV. OF SHELL OIL CO.

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

Ingred Name:EPOXY RESIN/AMINE ADDUCT

CAS:68610-36-0

Fraction by Wt: 73%

Other REC Limits:NONE SPECIFIED

ACGIH TLV:STEL 20 MG/M3

ingred Name:DIETHYLENETRIAMINE (DETA)

CAS:111-40-0

RTECS #:IE1225000

Fraction by Wt: 25%

Other REC Limits:NONE SPECIFIED

OSHA PEL:SKIN 5 PPM

ACGIH TLV:SKN 1PPM/STEL60MG/M3

ingred Name:PHENOL (SARA III)

CAS:108-95-2

RTECS #:SJ3327000

Fraction by Wt: 2%

Other REC Limits:NONE SPECIFIED

ACGIH TLV:5PPM;SKIN;STEL100PPM

EPA Rpt Qty:1000 LBS

DOT Rpt Qty:1000 LBS

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

LD50 LC50 Mixture:ACUTE ORAL LD50 (RAT):2.33 G/KG;530MG/M3

Routes of En

try: Inhalation:YES Skin:YES Ingestion:YES

Health Hazards Acute and Chronic:ACUTE; CORROSIVE TO EYE, SKIN,  
RESPIRATORY TRACT. HIGHLY TOXIC (CARDIAC ARREST/FATAL) BY DERMAL  
(ABSORPTION), INHALATION OR INGESTION. BLINDNESS, PERMANENT CORNEAL  
INJURY, VISION DISTURBANCES. SEVERE BURNS OF MOUTH, THROAT & GI  
IRRIT. BLADDER DAMAGE.

Explanation of Carcinogenicity:PHENOL HAS NOT BEEN FOUND TO BE A  
CO-CARCINOGEN, BUT IS REPORTED TO BE A TUMOR PROMOTER.

Effects of Overexposure:CHRONI

C; SKIN SENSITIZATION (ALLERGY), LUNG  
SENSITIZATION (ASTHMA, ALLERGY), KIDNEY DAMAGE, LIVER DAMAGE,  
CENTRAL NERVOUS SYSTEM DEPRESSION.

Medical Cond Aggravated by Exposure:PREEXISTING EYE, SKIN, RESP  
DISORDERS MAY BE AGGRAVATED. PREEXISTING SKIN OR LUNG ALLERGIES MAY  
INCREASE CHANCE OF DEVELOPING ALLERGY SYMPTOMS. IMPAIRED KIDNEY,  
LIVER AND HEART FUNCTIONS AGGRAVATED.

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

First Aid:EYE:IMMED FLUSH W/WATER 15 M

IN,HOLD LIDS OPEN. RINSE WHILE

GETTING MED AID. SKIN: IMMEDIATELY REMOVE CONTAMINATED CLOTH/SHOES. WIPE EXCESS, FLUSH WITH WATER 15 MIN. WASH WITH SOAP & WATER. GET MEDICAL AID. INHALATION: REMOVE TO FRESH AIR, GIVE OXYGEN IF DIFFICULT BREATHING, ARTIFICIAL RESPIRATION IF NO BREATH. GET MEDICAL AID. INGESTION: DO NOT INDUCE VOMITING. GIVE 1 GLASS WATER UNLESS VICTIM DROWSY, CONVULSING OR UNCONSCIOUS. GET MEDICAL AID IMMEDIATELY.

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

Flash Point Method: SCC

Flash Point

int: >200F, >93C

Extinguishing Media: USE WATER FOG, "ALCOHOL" FOAM, DRY CHEMICAL OR CO<sub>2</sub>.

Fire Fighting Procedures: WONT BURN UNLESS PREHEATED. DO NOT ENTER CONFINED FIRE SPACE WITHOUT FULL BUNKER GEAR, INCLUDING POSITIVE PRESSURE NIOSH SCBA. COOL FIRE EXPOSED CONTAINERS WITH WATER.

Unusual Fire/Explosion Hazard: DETA AND PHENOL VAPORS MAY BE RELEASED UNDER FIRE CONDITIONS AND NITROGEN OXIDES AND NITROGEN CONTAINING ORGANIC COMPOUNDS MAY BE PRODUCED UPON COMBUSTION.

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===== Accidental

Release Measures =====

Spill Release Procedures: MAY BURN (NOT READILY IGNITABLE). CAUTION WHEN CLEANING LARGE SPILL. LARGE: WEAR RESPIRATOR & PROTECTIVE CLOTHING. STOP LEAK AT SOURCE IF SAFE. DIKE, CONTAIN. USE VACUUM TRUCKS/PUMP TO STORAGE/SALVAGE TANK. SOAK UP REST WITH ABSORBENT. FLUSH AREA WITH WATER. SMALL: TAKE UP WITH ABSORBENT.

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

Handling and Storage Precautions: DANGER! CORROSIVE! STORE IN COOL, DRY PLACE WITH ADEQUATE VENTILATION. KEEP AWAY FROM OPEN FLAMES & HIGH TEMPERATURES.

Other Precautions: WARNING: SENSITIZER. CONTAINERS, EVEN EMPTY, CAN CONTAIN HAZARDOUS PRODUCT RESIDUES. MINIMIZE CONTACT WITH MATERIAL. WASH WITH SOAP & WATER BEFORE EATING, DRINKING, SMOKING, APPLYING COSMETICS, OR USING TOILET FACILITIES.

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

Respiratory Protection: AVOID BREATHING VAPOR/MISTS. IF EXPOSURE MAY OR DOES EXCEED OCCUPATIONAL EXPOSURE LIMITS,

USE NIOSH RESPIRATOR. IN

ACCORD W/29 CFR 1910.134 USE EITHER FULL-FACE, ATMOSPHERE-SUPPLYING RESPIRATOR OR AIR PURIFYING RESPIRATOR TO ORGANIC VAPOR.

Ventilation:USE VENTILATION AS REQUIRED TO CONTROL VAPOR CONCENTRATIONS.

Protective Gloves:WEAR CHEMICAL RESISTANT GLOVES.

Eye Protection:WEAR CHEMICAL GOGGLES IF CONTACT LIKELY.

Other Protective Equipment:AVOID CONTACT W/SKIN & CLOTHING. WEAR CHEMICAL RESISTANT PROTECTIVE CLOTHING. EYEWASH FOUNTAINS & SAFETY SHOWERS.

Work Hygi

enic Practices:LAUNDER CONTAMINATED CLOTHING BEFORE REUSE.

CONTAMINATED LEATHER ARTICLES, INCLUDING SHOES CANNOT BE DECONTAM, DESTROY.

Supplemental Safety and Health

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

HCC:B2

Vapor Pres:1

Spec Gravity:1.1 (WATER=1)

Solubility in Water:MISCIBLE

Appearance and Odor:LIGHT YELLOW LIQUID, AMMONIACAL ODOR.

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

Stability Indicator/Materials to Avoid:YES

CAN REAC

T WITH STRONG OXIDIZING AGENTS AND STRONG LEWIS OR MINERAL ACIDS.

Hazardous Decomposition Products:NITROGEN OXIDES, CARBON MONOXIDE AND UNIDENTIFIED ORGANIC COMPOUNDS MAY BE FORMED DURING COMBUSTION.

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

Waste Disposal Methods:KEEP OUT OF SURFACE WATER, SEWER & WATERWAYS. NOTIFY AUTHORITIES IF ANY EXPOSURE TO GENERAL PUBLIC/ENVIRONMENT LIKELY/OCCURS. EPA-CWA:PRODUCT OIL (SEC 311). REPORT SPILLS THAT CAUSE SHEEN

(800-424-880 2). RQ: 50 LBS. COMPLY W/LOCAL, FED, STATE REGS.

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