

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

===== 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 ===

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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

===== 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.

===== 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 MED AID.
INHALATION: REMOVE TO FRESH AIR, GIVE OXYGEN IF DIFFICULT BREATHING,
ARTIFICIAL RESPIRATION IF NO BREATH. GET MED AID. INGESTION: DO NOT INDUCE VOMIT.
GIVE 1 GLASS WATER UNLESS VICTIM DROWSY, CONVULSING OR
UNCONSCIOUSNESS. GET MED AID IMMEDIATELY.

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

Flash Point Method: SCC

Flash Point

in: >200°F, >93°C

Extinguishing Media: USE WATER FOG, "ALCOHOL" FOAM, DRY CHEMICAL OR CO₂.

Fire Fighting Procedures: WON'T 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.

===== Accidental

Release Measures =====

Spill Release Procedures: MAY BURN (NOT READILY IGNIT). CAUTION WHEN
CLEANING LARGE SPILL. LARGE: WEAR RESPIRATOR & PROTECTIVE CLOTH. 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.

===== 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, APPLY
COSMETICS, OR USING TOILET FACILITIES.

===== 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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