

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 ===

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

Phone:713-473-9461

CAGE:86961

===== 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 CLOTHES/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.

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

Flash Point Method: SCC

Flash Point

int: >200F, >93C

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

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.

=====
===== 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.

=====
===== 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.

=====
===== 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.

Disclaimer (provided with this information by the compiling agencies):

This information is formulated for use by elements of the Department of Defense. The United States of America in no manner whatsoever, expressly or implied, warrants this information to be accurate and disclaims all liability for its use. Any person utilizing this document should seek competent professional advice to verify and assume responsibility

for the suitability of this information to their particular situation.