

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

Product ID:EPON (R) RESIN 828

MSDS Date:01/01/1987

FSC:8030

NIIN:00-086-1506

MSDS Number: BLLTC

=== 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:713-473-9461/800-424-9300(CHEMTREC)

CAGE:86961

=== Contractor Identification ===

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

Ingred Name:BISPHENOL A/EPICHLOROHYDRIN BASED EPOXY RESIN

CAS:25068-38-6

RTECS #:KD4380000

Fraction by Wt: 100%

Other REC Limits:NONE SPECIFIED

Ingred Name:PRODUCED BY CONDENSATION OF EPICHLOROHYDRIN & BISPHENOL A.

RESIDUAL LEVELS OF EPICHLOROHYDRIN ARE CONTROLLED TO 1PPM-MAX
RTECS #:9999999ZZ
Other REC Limits:NONE SPECIFIED

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

LD50 LC50 Mixture:ORAL LD50:11.4 G/KG-RAT;15.6 G/KG-MOUSE

Routes of Entry: Inhalation:NO Skin:YES Ingestion:NO

Health Hazards Acute and Chronic:EYE: MODERATELY IRRITATING TO THE EYES. CONTACT W/PRODUCT AT ELEVATED TEMPERATURES CAN RESULT IN THERMAL BURNS. SKIN: MODERATELY IRRITATING TO THE SKIN. PRODUCT MAY

CAUSE SKIN SENSITIZATION. CONTACT W /PRODUCT AT ELEVATED TEMPERATURES CAN RESULT IN THERMAL BURNS. INHALATION: BECAUSE OF ITS LOW VOLATILITY, THIS PRODUCT

Explanation of Carcinogenicity:N/K DERMAL LD50: >20 ML/KG-RABBIT.

Effects of Overexposure:IS NOT LIKELY TO BE AN INHALATION HAZARD.

INGESTION: BASED ON PRODUCT TESTING, PRODUCT IS CONSIDERED TO HAVE A LOW ORDER OF ACUTE ORAL TOXICITY. SKIN: SENSITIZATION (ALLERGY) MAY BE EVIDENCED BY RASHE S, ESPECIALLY HIVES.

Medical

Cond Aggravated by Exposure:PRE-EXISTING SKIN AND EYE DISORDERS MAY BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT. PRE-EXISTING SKIN OR LUNG ALLERGIES MAY INCREASE THE CHANCE OF DEVELOPING INCREASED ALLERGY SYMPTOMS FROM EXPOSURE.

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

First Aid:EYE: FLUSH W/WATER-15 MIN, HOLD EYELIDS OPEN. SKIN: REMOVE CONTAM CLOTH/SHOES & WIPE EXCESS FROM SKIN. FLUSH W/ WATER. WASH W/SOAP/WATER. CAREFULLY REMOVE CLOTH; IF CLOTH I

S STUCK TO BURN

AREA, DO NOT PULL OFF/CUT AROUND IT. COVER AREA W/CLEAN MAT'L.

INHALE: REMOVE TO FRESH AIR. GIVE OXYGEN IF BREATHING DIFFICULT.

INGEST: DO NOT INDUCE VOMIT. GET NEEDED MEDICAL AID FOR EACH CONDITION.

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

Flash Point Method:PMCC

Flash Point:480F,249C

Lower Limits:N/AV

Upper Limits:N/AV

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

Fire Fighting Procedures:WILL NOT BURN UNLESS PREHEA

TED. DO NOT ENTER

CONFINED FIRE SPACE W/O FULL BUNKER GEAR, INCLUDING POS PRESS NIOSH
APPR'D SCBA. COOL FIRE EXPOSED CNTNRS W/WATER.

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

Spill Release Procedures:LG SPILL: WEAR RESPIRATOR & APPROP PROTECT
CLOTH. SHUT OFF LEAK SOURCE IF SAFE TO DO. DIKE/CONTAIN. REMOVE
W/VACUUM TRUCKS OR PUMP TO STORAGE/SALVAGE VESSELS. SOAK UP
W/ABSORB. FLUSH AREA W/ WATER. SM SPILL: TAKE UP W/ABSORB MAT'L &
PROPERLY DISPO
SE.

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

Handling and Storage Precautions:STORE IN COOL, DRY PLACE. KEEP FROM
OPEN FLAME/HIGH TEMPS. CONTAINERS (EVEN EMPTY) CONTAIN RESIDUES.
HANDLE PER HAZARD POTENTIAL OF CURING AGENT USED.

Other Precautions:HEATING THIS RESIN ABOVE 300 F IN THE PRESENCE OF AIR
MAY CAUSE SLOW OXIDATIVE DECOMPOSITION ABOVE 500 F., POLYMERIZATION
MAY OCCUR. DO NOT BREATH FUMES. AVOID CONTACT W/EYES & PROLONGED OR
REPEATED C ONT
ACT W/SKIN.

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

Respiratory Protection:USE A NIOSH-APPROVED RESPIRATOR AS REQUIRED TO
PREVENT OVEREXPOSURE. NOT ORDINARILY REQUIRED.

Protective Gloves:CHEMICAL RESISTANT GLOVES.

Eye Protection:WEAR SAFETY GLASSES OR GOGGLES.

Other Protective Equipment:AS REQUIRED TO MINIMIZE CONTACT.

Work Hygienic Practices:WASH WITH SOAP AND WATER BEFORE EATING,
DRINKING, SMOKING, APPLYING COSMETICS OR USING TOILET FACILITIES.

Supplementa

I Safety and Health

LAUNDER CONTAMINATED CLOTHING BEFORE REUSE. CONTAMINATED LEATHER
ARTICLES, EVEN SHOES, CANNOT BE DECONTAMINATED & SHOULD BE
DESTROYED TO PREVENT REUSE. MAY CAUSE IRRITATION. IN GENERAL, NO
TREATMENT N ECESSARY UNLESS LARGE AMOUNTS OF PRODUCT ARE INGESTED.

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

HCC:N1

Boiling Pt:B.P. Text:>500F,>260C

Vapor Pres:0.03 @ 77C

Spec Gravity:1.17

Solubility in Water:NEGLIGIBLE

Appearance and Odor:VERY LIGHT

YELLOW, VERY VISCOUS LIQUID.

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

Stability Indicator/Materials to Avoid: YES
STRONG OXID AGENTS, STRONG LEWIS/MNRL ACIDS & STRONG MNRL & ORGANIC BASES/ESPECIALLY PRIMARY/SECONDARY ALIPHATIC AMINES.
Stability Condition to Avoid: REACTS W/SOME CURING AGENTS. RUN-A-WAY CURE REACTIONS MAY CHAR/DECOMPOSE RESIN SYSTEM, GENERATING TOXIC FUMES/VAPORS.
Hazardous Decomposition Products: CARBON MONOXIDE, ALDEHYDES, ACIDS & OTHER ORGANIC SUBSTANCES MAY BE FORMED DURING COMBUST OR ELEVATED TEMP DEGRADATION.

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