MATERIAL SAFETY DATA SHEET

Product Name: Marinepoxy Resin Effective Date:04-01-02 Product Code: E res

1. **INGREDIENTS**:

Reaction products of Epichlorohydrin and Bisphenol A

Alkylglycidyl Ether

Benzyl Alcohol

CAS # 025-085-99-8

CAS # 068609-97-2

CAS # 100-51-6

CAS # 025-085-99-8

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). In addition, other substances not Hazardous per this OSHA Standard may be listed. Where proprietary ingredients shows, the identity may be made available as provided in this standard.

2. PHYSICAL DATA:

BOILING POINT: N/A
VAP PRESS: N/A
VAP DENSITY: N/A
SOL IN WATER: insolu

SOL. IN WATER: insoluble SP. GRAVITY: 1.13 +or- 0.01

APPEARANCE: light amber colored liquid

ODOR: faint epoxy odor

3. FIRE AND EXPLOSION HAZARD DATA:

FLASH POINT: 245 °F METHOD USED: PMCC FLAMMABLE LIMITS:

LFL: NA FL: NA

EXTINGUISHING MEDIA: foam, CO2, dry chemical

FIRE AND EXPLOSION HAZARDS: none

FIRE FIGHTING EQUIPMENT: Wear positive pressure self-contained breathing apparatus.

4. REACTIVITY DATA:

STABILITY: stable

CONDITIONS TO AVOID: Excess heating over long periods of time.

INCOMPATABILITY: (SPECIFIC MATERIALS TO AVOID) Base.

HAZARDOUS DECOMPOSITION PRODUCTS: The by-products expected in incomplete prolysis or combustion of epoxy resins are mainly phenolics, carbon monoxide, and water. The thermal decompression products of epoxy resins therefore should be treated as potentially hazardous substances. Appropriate precautions should be taken.

HAZARDOUS POLYMERIZATION: Will not occur by itself but masses more than I pound of product plus aliphatic amine will cause irreversible polymerization with considerable heat buildup.

5. ENVIROMENTAL AND DISPOSAL INFORMATION:

ACTION TO TAKE FOR SPILLS/LEAKS: Soak up in absorbent material and collect in suitable containers. Residual may be removed using steam or hot soapy water.

DISPOSAL METHOD: Burn in adequate incinerator or bury in an approved landfill; in accordance with local, state, and federal regulations.

6. HEALTH HAZARD DATA:

EYE: Minor transient irritation. No corneal injury is likely.

SKIN CONTACT: May cause allergic skin reaction in susceptible individuals. Prolonged exposure not likely to cause significant skin irritation. Repeated exposure may cause skin irritation.

SKIN ABSORPTION: A single prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts. The LD50 for skin absorption in rabbits is 20,000 mg/kg.

INGESTION: Low acute oral toxicity, LD50 (rat) greater than 400 mg/kg. No hazards anticipated from ingestion incidental to industrial exposure.

INHALATION: Vapors are unlikely due to physical properties. Not a problem unless heated to high temperature.

SYSTEMIC AND OTHER EFFECTS: Except for skin sensitization, repeated exposures to low molecular weight epoxy resin of this type are not anticipated to cause any significant adverse effects.

7. FIRST AID:

EYES: Irrigation of the eye immediately with water for five minutes is good safety practice.

SKIN: Contact will probably cause no more than irritation. Wash off in flowing water or shower. Wash clothing before reuse.

INGESTION: Low in toxicity. No adverse effects anticipated by this route of exposure incidental to proper industrial handling.

INHALATION: Low toxicity. No adverse effects anticipated. Provide fresh air and rest.

NOTE TO PHYSICIAN: No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

8. HANDLING PRECAUTIONS:

VENTILATION: Good ventilation is usually adequate for most operations.

RESPIRATORY PROTECTION: None needed.

SKIN PROTECTION: Use impervious gloves when prolonged or frequently repeated contact could occur.

EYE PROTECTION: Use safety glasses.

9. ADDITIONAL INFORMATION:

SPECIAL PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Practice good caution and personnel cleanliness to avoid skin and eye contact. Avoid breathing vapors of heated material.

10. NFPA HAZARD RATING:

(4=EXTREME 3=HIGH 2=MODERATE 1=SLIGHT 0=INSIGNIFICANT)
HEALTH-1

FIRE -1 REACTIVITY-0 SPECIFIC-0

II. REGULATORY INFORMATION:

STATUS ON SUBSTANCE LISTS:

The concentrations shown in this document are maximum or ceiling levels (expressed in weight %, unless otherwise specified) to be used for regulations. Trade Secrets are indicated by "TS".

FEDERAL EPA

COMPRHENSIVE ENVIRONMENTAL RESPONSE. COMPENSATION. AND LIABILITY ACT OF 1980 (CERCLA):

Requires notification of the National Response Center of release of quantities of Hazardous Substances equal to or greater than the reportable quantities (RQ's) in 40 CFR 302.4. Components present in this product at level, which could require reporting under the statute are:

Chemical Name CAS Number %By Weight RQ NONE

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SAR) TITLE III:

Sections 301-304 require emergency planning based on Threshold Planning Quantities (TPQ's) and release reporting based on Reportable Quantities (RQS) in 4OCFR 355. Components present in this product at level, which could require reporting under the statute are:

Chemical Name CAS Number %By Weight NONE

Sections 311-3:12 require products to be reviewed and applicable EPA Hazard Definitions be identified. EPA HAZARD CLASSIFICATIONS:

Acute	Chronic	Fire	Pressure	Reactive
<u>Hazard</u>	Hazard	<u> Hazard</u>	<u>Hazard</u>	<u>Hazard</u>
No	No	No	No	No

Section 313 requires submission of annual reports of releases of toxic chemicals that appear in 40 CFR 372 (for SARA 313). This information must be included in all MSD's that are copied and disuibuted for this material. Components present in this proouct at level, which could require reporting under the satute are:

<u>Chemical Name</u>

<u>CAS Number</u>

<u>% By Weight</u>

NONE

If you are unsure if you must report more information, call the EPA Emergency Planning and Right-To-Know

Hot line: 800-535-0202 or 202-479-2449.

TOXIC SUBSTANCE CONTROL ACT TSCA):

The components of this product are contained on the chemical substance inventory list.

OTHER REGULATORY INFORMATION:

D.O.T. Shipping Name: Not Regulated

The information herei is given in good faith, but no warranty expressed or implied is made.