

MATERIAL SAFETY DATA SHEET

TwoMorrow Holdings LLC. 1360 Old Dixie HWY #103 Emergency Phone (772) 770-1225

MSDS for MarinEpoxy Curing Agents B Side

PRODUCT NAME: MarinEpoxy Fast Hardener, MarinEpoxy Slow Hardener, MarinEpoxy Medium Hardener curing agents (hardeners). Effective Date: 6-1-2015

Product Code: E_har (Fast, Slow, Medium)

INGREDIENTS:

Polyamine Cas # 140-31-8 < 40%

Alkylphenol Cas # 25154-52-3 < 40%

Balance of ingredients are trade secrets:

Epoxy Additives and Modified Cycloaliphatic Amine Reaction Products: CAS#: Proprietary

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 Ingredient shows, the identity may be made available as provided in this standard.

2. PHYSICAL DATA:

BOILING POINT: > 400°F

VAP PRESSURE: <1 mmHg@ 20°C, 68°F

VAP DENSITY: >1

SOL. IN WATER: Moderately soluble

SP. GRAVITY: 0.96

APPEARANCE: Pale straw colored liquid ODOR: Amine odor.

3. FIRE AND EXPLOSION HAZARD DATA:

FLASHPOINT: 200°F, 93°C METHOD USED: PMCC FLAMMABLE LIMITS

LFL: Not determined

UFL: Not determined EXTINGUISHING MEDIA: Water fog, alcohol foam, CO₂, dry chemical. FIRE

& EXPLOSION HAZARDS: Use full protective clothing (see Section 8) FIRE-FIGHTING

EQUIPMENT: Use a positive pressure, self-contained breathing apparatus.

4. REACTIVITY DATA:

STABILITY: (CONDITIONS TO AVOID) Can react strongly with epoxy resins at elevated temperatures. INCOMPATIBILITY: (SPECIFIC MATERIALS TO AVOID) Epoxy resins under uncontrolled conditions. HAZARDOUS DECOMPOSITION PRODUCTS: Nitrogen oxides when burned. HAZARDOUS POLYMERIZATION: Will not occur.

5. ENVIRONMENTAL AND DISPOSAL INFORMATION:

ACTION TO TAKE FOR SPILLS/LEAKS: Large spill—dike up and pump into appropriate containers. Small spill—use non combustible absorbent material/sand and shovel into suitable containers.

DISPOSAL METHOD: Large quantities should be recovered. Collect small quantities in waste metal drums for removal to an approved landfill, or incinerate in accordance with local, state, and federal regulations.

6. HEALTH HAZARD DATA:

EYE: May cause severe corneal injury, which may result in permanent impairment of vision, even blindness. Vapors may irritate eyes.

SKIN CONTACT: May cause severe injury to skin following prolonged or repeated contact, and may cause skin sensitization or other allergic reactions.

SKIN ABSORPTION: A single prolonged exposure may result in the material being absorbed in harmful amounts. The LD50 for skin absorption in rabbits is 880 mg/kg.

INGESTION: Single dose oral toxicity is low. The oral LD50 for female rats is >1000mg/kg. Ingestion may cause gastrointestinal irritation or ulceration. Ingestion may cause burns of mouth and throat.

INHALATION: May cause respiratory sensitization or asthma in susceptible individuals. Excessive exposure may cause irritation to respiratory tract.

SYSTEMIC AND OTHER EFFECTS: Results of in vitro ("test tube") mutagenicity test have been negative.

7. FIRST AID:

EYES: Irrigation of the eye immediately with water for at least 30 minutes is required. Promptly seek medical attention. SKIN: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing, preferably under a safety shower. Seek medical attention immediately. Avoid prolonged or repeated contact to skin. Wash thoroughly after handling.

INGESTION: Do not induce vomiting. Give large amounts of water or milk if available and transport to medical facility. INHALATION: Remove to fresh air if effects occur. Consult medical personnel.

NOTE TO PHYSICIAN: Corrosive. May cause stricture. If lavage is performed, suggest endotracheal and/or esophagoscopy. If burn is present, treat as any thermal burn, after decontamination. No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

8. HANDLING PRECAUTIONS:

EXPOSURE GUIDELINE: None established.

VENTILATION: Control airborne concentration below the exposure guideline. Use only with adequate ventilation. Local exhaust ventilation may be necessary for some operations.

RESPIRATORY PROTECTION: Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required for certain operations, use an approved air-purifying respirator.

SKIN PROTECTION: Use protective clothing impervious to this material. Selection of specific items such as gloves, boots, apron, or full-body suit will depend on operation. Safety shower should be located in immediate work area. Remove contaminated clothing immediately, wash skin area with soap and water, and clothing before reuse. Contaminate leather items, such as shoes, belts and watchbands, should be removed and destroyed.

EYE PROTECTION: Use chemical goggles. If vapor causes eye irritation, use full-face respirator. Eye wash fountain should be located in immediate work area.

9. ADDITIONAL INFORMATION:

SPECIAL PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Ground all transfer equipment. Hold bulk storage under a nitrogen blanket. This product should not come in contact with copper or copper-bearing alloys. Good general housekeeping procedure should be followed.

10. NFPA HAZARD RATING:

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

11. 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	RO	NONE
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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 40CFR 355. Components present in this product at level, which could require reporting under the statute are:

Chemical Name	CAS Number	% By Weight	NONE
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Sections 311-312 require products to be reviewed and applicable EPA Hazard Definitions are identified.

EPA HAZARD CLASSIFICATIONS:

Acute	Chronic	Fire	Pressure	Reactive
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Hazard	Hazard	Hazard	Hazard	Hazard
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Yes	Yes	No	No	No
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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 distributed for this material. Components present in this product at level, which could require reporting under the statute are:

Chemical Name	CAS Number	% By Weight	NONE
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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 202-4792449.

TOXIC SUBSTANCES 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 herein is given in good faith, but no warranty expressed or implied is made.

SECTION 14 - TRANSPORT INFORMATION

DOT NON-BULK SHIPPING NAME RESIN COMPOUND-Not DOT Regulated. DOT BULK

SHIPPING NAME RESIN COMPOUND-Not DOT Regulated. ICAO/IATA SHIPPING DATA

RESIN COMPOUND-Not LATA Regulated.

IMO SHIPPING DATA

RESIN COMPOUND-Not IMO Regulated

SECTION 15 LABEL ELEMENTS

Labeling according to Regulations (EC) No 1272/2008

Hazard Pictograms:

Signal Word: DANGER

Hazard Statements:

H302 - Harmful if swallowed
H314 - Causes severe skin burns and eye damage
H361 - Suspected of damaging fertility or the unborn child
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects

Precautionary Statements:

P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P260 - Do not breathe mist, vapors
P264 - Wash Skin thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P273 - Avoid release to the environment
P280 - Wear eye protection, face protection, protective clothing, protective gloves
P301+P312 - If swallowed: Call a POISON CENTER or doctor/physician if you feel unwell
P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P308+P313 - If exposed or concerned: Get medical advice/attention P310 - Immediately call a POISON CENTER or doctor/physician.
P330 – Rinse mouth
P363 – Wash contaminated clothing before reuse
P391 – Collect spillage P405 – Store locked up
P501 – Dispose of contents/container in accordance with local, regional, national, and/or international regulations.

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