

**SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION.****W. F. Taylor Co., Inc.**

11545 Pacific Avenue  
Fontana, CA 92337-8228  
951/360-6677

CHEMICAL EMERGENCY HOTLINE 1-800-535-5053

PRODUCT NAME: **ENCAP 500 BARRIER COAT**  
ITEM NUMBER: 500-1-EN  
ITEM DESCRIPTION: Encap 500 Barrier Coat  
PRODUCT DESCRIPTION: PART A: WHITE VISCOUS LIQUID, PART B: YELLOW LIQUID  
CHEMICAL FAMILY: EPOXY RESIN AND POLYAMINE-EPOXY RESIN ADDUCT  
REVISION DATE: 02/09/10

## CHEMICAL NAMES, COMMON NAMES:

PART A: Modified Bisphenol A-Epichlorohydrin Based Epoxy Resin Solution

PART B: Polyamine - Epoxy Resin Adduct Emulsion

HMIS HAZARD RATING		PART A	PART B
Least:	0	Health: 2	2
Slight:	1	Flammable: 1	1
Moderate:	2	Reactivity: 0	0
High:	3		
Extreme:	4		

PREPARED BY: ROBERT DDAMULIRA

PREEMPTS PREVIOUS MSDS SHEETS

**SECTION II HAZARDOUS INGREDIENTS**

<u>COMPONENT/CAS #</u>	<u>ACGIH TLV</u>	<u>OSHA PEL</u>	<u>% WT</u>	<u>NOTES</u>
2-PROPOXYETHANOL 2807-30-9	NE	NE	8-12	SARA Rep.
PART A (ABOVE)				

\*Product of the condensation reaction of Epichlorohydrin and Bisphenol A. These raw materials are consumed in the process. Residual levels of Epichlorohydrin are typically less than 1 ppm.

Polyamine-Epoxy Resin adduct	NE	NE	< 60
PART B (ABOVE)			

**SECTION III PHYSICAL DATA - PART A**

BOILING POINT: 212 - 301 degrees F  
SPECIFIC GRAVITY: 1.07  
SOLUBILITY IN WATER: Miscible  
EVAPORATION RATE(nBuAc=1): < 1  
VAPOR DENSITY(AIR=1): > 1  
VAPOR PRESSURE, MM, HG AT 20 DEGREES C:< 20  
MELTING POINT: NA  
APPEARANCE: Opaque white viscous liquid

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ODOR: Mild  
GRAMS V.O.C. PER LITER OF MATERIAL: Negligible

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### SECTION III PHYSICAL DATA - PART B

BOILING POINT: > 212 degrees F  
SPECIFIC GRAVITY: 1.1 (water: 1)  
MISCIBILITY IN WATER: miscible  
DENSITY: 1.1 g/cm<sup>3</sup>  
VAPOR PRESSURE: 18.00 mm Hg  
MELTING POINT: < 32 degrees F  
APPEARANCE: yellow emulsion  
ODOR: ammoniacal  
pH: 9.2  
GRAMS V.O.C. PER LITER OF MATERIAL: Negligible  
GRAMS V.O.C. PER LITER OF COATING: Negligible

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### SECTION IV FIRE AND EXPLOSION HAZARD DATA - PART A

FLASH POINT AND METHOD: > 200 Degrees F (setaflash)  
FLAMMABLE LIMITS IN AIR, % VOLUME: LOWER: NA UPPER: NA  
FIRE EXTINGUISHING MEDIA: Water Fog, Carbon Dioxide, "Alcohol" Foam, Dry Chemical SPECIAL  
FIREFIGHTING PROCEDURES: Material will not burn unless preheated. Do not enter closed or confined work area without proper protective equipment. Firefighting personnel should wear respiratory protection (self contained breathing apparatus). Cool fire exposed containers with water.  
UNUSUAL FIRE AND EXPLOSION HAZARD: Do not expose to excessive heat, open flame or sparks.

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### SECTION IV FIRE AND EXPLOSION HAZARD DATA - PART B

FLASH POINT AND METHOD: Not available  
FIRE EXTINGUISHING MEDIA: alcohol resistant foam, Carbon Dioxide, Dry Chemical, Dry sand, Limestone Powder  
SPECIFIC HAZARDS: may generate ammonia gas. May generate toxic nitrogen oxide gases. Incomplete combustion may form carbon monoxide. Downwind personnel must be evacuated. Burning produces obnoxious and toxic fumes. Do not enter closed or confined work area without proper protective equipment.  
SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTING PERSONNEL: Use personal protective equipment. Wear self contained breathing apparatus for firefighting if necessary.

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### SECTION V HEALTH HAZARD IDENTIFICATION - PART A

SYMPTOMS OF OVER EXPOSURE:  
INHALATION: Could cause respiratory tract sensitization and/or irritation. May be harmful if inhaled; may produce damage to red blood cells.  
EYES: Product may be severely irritating to the eyes.  
SKIN: May be irritating to the skin. Prolonged or repeated liquid contact can result in defatting and drying of the skin which may result to skin irritation and dermatitis. Product is toxic and is harmful if absorbed through the skin. may produce damage to red blood cells. Product may cause skin sensitization.

INGESTION: (not a likely route of entry under proper handling conditions) May be moderately toxic and maybe harmful if swallowed. May produce damage to red blood cells.

HEALTH EFFECTS OR RISK FROM EXPOSURE:

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ACUTE: May cause mild skin irritation.

CHRONIC: May cause mild skin irritation.

**AGGRAVATED MEDICAL CONDITIONS:**

Preexisting eye, skin and respiratory disorders may be aggravated by exposure to this product. Preexisting skin and respiratory allergies may increase the chance of developing increased allergy symptoms from exposure to this product.

**FIRST AID PROCEDURES:**

**EYES CONTACT:** Immediately wash with plenty of water for at least 15 minutes while holding eyelids open. Seek medical attention.

**SKIN CONTACT:** Immediately remove contaminated clothing or shoes. Wipe excess from skin and flush with plenty of water for at least 15 minutes. Soap if available or follow by washing with soap and water. Do not reuse contaminated clothing. Contaminated clothing should be thoroughly cleaned. Get medical attention. Contaminated leather articles including shoes, cannot be decontaminated and should be destroyed to prevent reuse.

**INHALATION:** Remove victim to fresh air, administer oxygen. Seek Medical attention.

**INGESTION:** If swallowed, call physician.

**NOTE TO PHYSICIAN:** If more than 2.0 ml per kg has been ingested and vomiting has not occurred, emesis should be induced with supervision. Keep victim's head below hips to prevent aspiration. If symptoms such as loss of gag reflex, convulsions, or unconsciousness occur before emesis, gastric lavage using a cuffed endotracheal tube should be considered.

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**SECTION V HEALTH HAZARD IDENTIFICATION - PART B**

Mild respiratory tract irritant

Severe eye irritant

Corrosive to the eyes

Mild skin irritant

Risk of serious damage to the eyes

**EXPOSURE GUIDELINES:**

Target Organs: Eyes

Symptoms: Repeated and/prolonged exposure to low concentrations of vapors and/or aerosols may cause sore throat.

**SYMPTOMS OF OVER EXPOSURE:**

**INHALATION:** Harmful if inhaled. May cause delayed lung injury.

**EYES:** Severe eye irritation. Causes eye burns.

**SKIN:** May be irritating to the skin. Product may be toxic and may be harmful if absorbed through skin.

**INGESTION:** (not a likely route of entry under proper handling conditions) May be toxic and may be harmful if swallowed.

**HEALTH EFFECTS OR RISK FROM EXPOSURE:**

**ACUTE:** May cause mild skin irritation

**CHRONIC:** This product contains no listed carcinogens according to IARC, ACGIH, NTP and/or OSHA in concentrations of 0.1 percent or greater.

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Preexisting eye, skin, and respiratory disorders may be aggravated by exposure to this product.

**FIRST AID PROCEDURES:**

**EYES CONTACT:** Immediate medical attention is required. Rinse immediately with plenty of water (at least 20 minutes) while holding the eyelids open. Seek medical attention.

**SKIN CONTACT:** Immediately remove contaminated clothing or shoes, wipe excess from skin and flush with plenty of water for at least 20 minutes. Use soap if available or follow by washing with soap and water. Do not reuse clothing until thoroughly cleaned. Seek medical attention. Contaminated leather articles including shoes cannot be decontaminated and should be destroyed to prevent reuse.

**INHALATION:** Move to fresh air. Administer oxygen if breathing is difficult. Seek medical attention.

**INGESTION:** If swallowed, seek medical attention. Prevent aspiration of vomit. Turn victim's head to the side.

**NOTE TO PHYSICIAN:** See Section V - Part A

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**SECTION VI REACTIVITY DATA - PART A**

**STABILITY:** Stable

**CONDITIONS AND MATERIALS TO AVOID:** Can react vigorously with strong oxidizing agents, strong Lewis or mineral acids and strong mineral and organic bases especially primary and secondary aliphatic amines. Reaction with some curing agents may produce considerable heat.

**HAZARDOUS DECOMPOSITION PRODUCTS (INCLUDING COMBUSTION PRODUCTS):** Carbon dioxide, aldehydes, acids, and other organic compounds of unknown structure. Do not breathe smoke or fumes. Wear appropriate protective equipment.

**HAZARDOUS POLYMERIZATION:** Will not occur.

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**SECTION VI REACTIVITY DATA - PART B**

**STABILITY:** Stable under normal conditions.

**CONDITIONS AND MATERIALS TO AVOID:** Organic acids (acetic acid, citric acid, etc.) Mineral acids. Product slowly corrodes copper, aluminum, zinc and galvanized surfaces. Incompatible with bases. Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion. Avoid contact with oxidizing agents, sodium hypochlorite.

**HAZARDOUS DECOMPOSITION PRODUCTS (INCLUDING COMBUSTION PRODUCTS):** Carbon monoxide, carbon dioxide, nitric acid, ammonia, nitrogen oxides. Nitrogen oxide can react with water to form corrosive nitric acid

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**SECTION VII SPILL OR LEAK PROCEDURES - PARTS A & B**

**STEPS TO BE TAKEN IN CASE MATERIAL IS SPILLED**

**PART A:** May burn although not readily ignitable.

**Part B:** Water based

**FOR LARGE SPILLS:** Eliminate potential sources of ignition. Wear self-contained breathing apparatus and chemically protective clothing, gloves and eye/face protection. Shut off source of leak only if safe to do so. Dike and contain. Remove with vacuum trucks or pump to storage/salvage vessels. Soak up material with sand. Place contaminated material in non-leaking container for proper disposal. Flush area with water to remove trace residue. Dispose flush solution as above.

**FOR SMALL SPILLS:** Take up with an absorbent material and place in non-leaking containers

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for proper disposal.

DO NOT MIX SPILLED PART A AND PART B. KEEP SEPARATED.

NOTE: DISPOSAL OF ALL WASTES IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS.

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### **SECTION VIII SPECIAL PROTECTION INFORMATION - PARTS A & B**

VENTILATION AND ENGINEERING CONTROLS: Use local exhaust. Do not use closed air-circulating system. Open doors and windows if necessary.

RESPIRATORY PROTECTION: NIOSH respirator if above TLV.

PROTECTIVE GLOVES: Chemical resistant gloves.

EYE PROTECTION: Chemical goggles or face shield

OTHER CLOTHING AND EQUIPMENT: If clothing becomes contaminated, clean before re-use.

Discard contaminated leather articles.

WORK PRACTICES, HYGIENIC PRACTICES: FOLLOW LABEL INSTRUCTIONS.

OTHER HANDLING AND STORAGE REQUIREMENTS: Protect against physical damage. Store in a cool place. Keep away from heat and sparks.

PROTECTIVE MEASURES DURING MAINTENANCE OF CONTAMINATED EQUIPMENT: Use goggles and gloves when cleaning equipment.

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### **SECTION IX SPECIAL PRECAUTIONS - PARTS A & B**

Keep out of the reach of children. Store in a cool, dry place with adequate ventilation.

Keep away from open flames and high temperatures.

WARNING: Severe eye irritant. Maybe toxic if absorbed through skin. Possible blood toxin. May cause skin sensitization. May cause skin and respiratory tract irritation, Containers, even those that have been emptied can contain hazardous product residues. Minimize bodily contact with material. Wash with soap and water before eating, drinking, smoking, applying cosmetics, or using toilet facilities. Launder contaminated clothing before reuse. Air-dry contaminated clothing in well ventilated area before laundering. Contaminated articles including shoes cannot be decontaminated and should be destroyed to prevent reuse. To avoid thermal burns, avoid contact with hot product.

**PART A**  
Heating this resin above 300 degrees F in the presence of air may cause slow oxidative decomposition; above 500 degrees F, polymerization may occur. Some curing agents, e.g. , aliphatic amines can produce exothermic reactions which in large masses can cause runaway polymerization and charring of the reactants. Fumes and vapors from these thermal and chemical decompositions can vary widely in composition and toxicity. DO NOT BREATHE FUMES. Use a NIOSH-approved respirator as required to prevent over exposure. In accord with 29 CFR 1910.134, use either an atmosphere-supply respirator or an air purifying respirator for organic vapors.

**PART B**  
Keep self contained breathing apparatus readily available for emergency use. In atmospheres where the material is sprayed, workers should avoid contact with aerosols containing EPILINK curing agent through proper engineering controls such as exhaust ventilation and/or proper protective equipment such as full faced air supplied respirators, gloves, and full body protective clothing. Wear proper respirator if ventilation is inadequate.

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#### **SECTION X TOXICOLOGICAL PROPERTIES - PART A & B**

##### 2-Propoxyethanol

No teratogenic effects on prgrant rats exposed to 100 to 400 ppm. Maternal toxicity was observed at all dose levels.

Toxic effects on red blood cells on male and female rats exposed to 400 ppm of vapor concentration of 2-propoxyethanol. Secondary effects on spleen and transient hemoglobinemia were observed.

##### Polyamine- epoxy resin adduct

Ingestion: LD50: > 2,000 mg/kg on rat

Skin: LD50: > 2,000 mg/kg on rabbit, Mild skin irritation

Eyes: severe eye irritation. Corrosive to eyes.

Inhalation: Inhalation of aerosols of a chemically similar material resulted in the death of rats during administration and in transient central nervous system symptoms including lethargy, ataxia, tremors, and convulsions.

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#### **SECTION XI REGULATORY INFORMATION - PARTS A & B**

##### USA

All components are in TSCA inventory

PROTECTION OF STRATOSPHERIC OZONE (PURSUANT TO SECTION 611 OF THE CLEAN AIR ACT AMENDMENTS OF 1990): PER 40 CFR PART 82, This product does not contain any Class I or Class II ozone depleting substances.

OSHA HAZARD COMMUNICATION STANDARD (29CFR1910.1200) HAZARD CLASS(ES)

PARTS A & B : Hazardous

EPA SARA TITLE III SECTION 312 (40CFR370) HAZARD CLASS

PART A: Acute and Chronic Health Hazard

PART B: Acute Health Hazard

EPA SARA TITLE III SECTION 313 (40CFR 372)

PARTS A : GLYCOL ETHER

Additional Information:

Part B

EU: Included on EINECS Inventory or polymer substance

Canada(DSL),Australia(AICS), Japan(ENCS), South Korea(ECL), China(SEPS),

Phillippines(PICCS) ; Not on inventory

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#### **SECTION XII SHIPPING DATA - PARTS A & B**

D.O.T. PROPER SHIPPING NAME (49CFR172.101-102):

PART A: None

PART B: None

HAZARDOUS SUBSTANCE(49CFR CERCLA LIST): No

D.O.T. HAZARD CLASSIFICATION (49CFR 172.101-102):

PART A: Not hazardous

PART B: Not regulated

OTHER REQUIREMENTS:

PART A: None

PART B: Not regulated (IATA, IMDG, CTC)

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**NOTICE**

W.F. TAYLOR believes the data set forth herein are accurate as of the date hereof. TAYLOR makes no warranty with respect thereto and expressly disclaims all liability for reliance thereon. Such data are offered solely for your consideration, investigation, and verification.

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