MATERIAL SAFETY DATA SHEET

VINYL ESTER COATING PART A

PRODUCT NAME: Epoxy.com Product # 663 VINYL ESTER COATING PART A HMIS CODES: H F R P

PRODUCT CODE: 2 3 2 C

SECTION 1: MANUFACTURER IDENTIFICATION

MANUFACTURER'S NAME: Epoxy.com a division Epoxy Systems, Inc.

ADDRESS: 20774 W. Pennsylvania Ave Dunnellon Florida 34431

SECTION 2: HAZARDOUS INGREDIENTS/SARA III INFORMATION

HAZARDOUS COMPONENTS Vinyl Ester Resin Styrene*	CAS NUMBER 068002-44-8	OSHA PEL NE	ACGIH TLV NE	WT % 80-90	YES (IARC)
Unsaturated Polyester Prepolymer	65556-71-0	NE	NE	0-10	NO
Cobalt Naphthenate**	61789-51-3	NE	.01 mg/m3	0-10	NO

Depending on color one or more of the following may be present:

Titanium Dioxide	13463-67-7	10 mg/m3	NO
Slack Iron Oxide	1317-61-9	10 mg/m3	NO
Red Iron Oxide	1309-37-1	10 mg/m3	NO
Yellow Iron Oxide	51274-00-1	5 mg/m3	NO
Chromium Oxide	1308-38-9	0.5 mg/m3	NO
Titanium Yellow	8007-18-9	10 mg/m3	NO

Substances listed are present in concentration of 1% or greater, or 0.1% if cited as a potential Carcinogen in the OSHA hazards communication standard. Where proprietary ingredient is listed, the identity is available as provided in 29 CFR 1910.1200.

NE - Not Established

SECTION 3: PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING RANGE : 313° F (styrene) VAPOR DENSITY : 3.6 (styrene)

VAPOR PRESSURE : 7 mm Hg @ 75° F (styrene)

VOC : 2.9 lbs/gallon

SOLUBILITY IN WATER : NIL

APPEARANCE AND ODOR : Moderately viscous liquid with pungent odor

SPECIFIC GRAVITY (H20=1) : 1.1566

EVAPORATION RATE : Heavier than air

^{*}Present at level of 44 wgt% (regulated)

^{**}Present at level of 50 PPM in product (Regulated OSHA 2-1).

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: 74-84° F
METHOD USED: PMCC

FLAMMABLE LIMITS IN AIR BY VOLUME - LOWER: 0.07%

UPPER: 8.9%

EXTINGUISHING MEDIA: Water fog, foam, dry chemical, CO2

OSHA FLAMMABILITY CLASSIFICATION: Combustible liquid, Class I B

SPECIAL FIRE FIGHTING PROCEDURES: Wear goggles and self contained positive pressure breathing equipment.

UNUSUAL FIRE AND EXPLOSION HAZARDS: With exposure to heat of fire a strong exothermic reaction may cause decomposition and release of toxic fumes. Keep vapors away from sources of ignition. Cool containers with water spray.

SECTION 5: REACTIVITY DATA

STABILITY: Stable under normal conditions. Do not store in direct sunlight or above 100° F

CONDITIONS TO AVOID: Avoid contact with oxidizing compounds.

INCOMPATIBILITY (MATERIALS TO AVOID): Avoid contact with iron or aluminum chlorides or peroxides.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Carbon Monoxide.

HAZARDOUS POLYMERIZATION: May occur

SECTION 6: HEALTH HAZARD DATA

HEALTH RISKS AND SYMPTOMS OF EXPOSURE:

INHALATION: Styrene portion is volatile. Vapors can be harmful in high concentrations. Can cause irritation to upper respiratory tract. Can cause narcosis.

SKIN: Prolonged exposure to skin may cause irritation. Not likely to be absorbed at harmful levels. **EYE:** Vapors may irritate and cause tears in the eyes. Liquid can cause some corneal injury.

INGESTION: Oral toxicity is low. However, if liquid enters lungs it may be absorbed and cause damage to other organs.

HEALTH HAZARDS (ACUTE AND CHRONIC): No data available.

CARCINOGENICITY:

NTP CARCINOGEN: No IARC MONOGRAPHS: Yes OSHA REGULATED: No

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

EMERGENCY AND FIRST AID PROCEDURES:

EYES: Flush with potable water immediately for 15 minutes. If irritation develops, get medical attention.

SKIN: Remove with soap and water.

INGESTION: Do not induce vomiting. Get immediate medical attention.

INHALATION: Remove to fresh air. If unconscious, apply mouth to mouth resuscitation. Get medical attention immediately.

SECTION 7: PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Flammable material. Isolate from all sources of ignition. Protect personnel involved in clean-up from vapors of styrene. Soak up spill with absorbent material such as clay and sand.

WASTE DISPOSAL METHOD: Place in containers for disposal. Residual resin may be removed by steam cleaning or with the use of non-flammable solvent such as 1-1-1 Trichloroethane. Burn in an approved incinerator or bury in an approved landfill.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Keep containers tightly closed when not in use. If mixtures of A and B are allowed to remain in the mixing vessel past pot life deadline, heat and a strong reaction will result.

OTHER PRECAUTIONS: Hazardous waste per SARA III.

SECTION 8: CONTROL MEASURES

RESPIRATORY PROTECTION: If TLV exceeded, use a NIOSH approved respirator. **VENTILATION:** Provide ventilation to keep styrene TLV below the exposure guideline value.

PROTECTIVE GLOVES: Wear protective gloves. **EYE PROTECTION:** Wear protective goggles.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Wear protective body covering clothing when handling.

WORK/HYGIENIC PRACTICES: Practice good industrial hygiene. Wash hands thoroughly after use, before eating or

smoking.

SECTION 9: REGULATORY INFORMATION

SARA TITLE III SECTION 313: This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right to Know Act of 1986 and of 40 CFR 372:

CAS # Chemical Name Percent by Weight 000100-42-5 Styrene <45%

SARA TITLE III SECTION 311/312: This product has been reviewed according to the EPA "Hazard Catagories" promulgated under Sections 311 and 123 of the Superfund Amendment and Reauthorization Act of 1986 and is considered under applipable definitions to meet the following catagories:

An immediate health hazard A delayed health hazard A fire hazard A reactive hazard

D. O. T. PROPER SHIPPING NAME: Resin solution, flammable

PROPER SHIPPING NAME: Resin solution, flammable **HAZARD CLASS:** Class 3, Flammable Liquid

UN/NA ID NUMBER: UN 1866
PACKING GROUP: III

SECTION 10: DISCLAIMER

Data and recommendations presented herein are based upon our and other researchers and are believed to be accurate. The products discussed are distributed without warranty (expressed or implied) and the customer shall make his own determination of suitability for his particular purpose.