MATERIAL SAFETY DATA SHEET

PRODUCT NAME: EPOXY.COM #676 100% SOLIDS CONDUCTIVE EPOXY NOVOLAC PART A

HMIS CODES: Η FRP

PRODUCT CODE: Epoxy.com #676- clear 1 1 0 B

SECTION 1: MANUFACTURER IDENTIFICATION

MANUFACTURER'S NAME: EPOXY SYSTEMS, INC.

ADDRESS: 20774 West Pennsylvania Ave.

Dunnellon, FL 34431

EMERGENCY NUMBER: 1-800-633-8253 **DATE PRINTED:** 04/13/10

INFORMATION NUMBER: 1-352-489-1666 PREPARER: KATE FONTAINE

SECTION 2: HAZARDOUS INGREDIENTS

ACGIH

CAS NUMBER OSHA PEL TLV HAZARDOUS COMPONENTS WT % CARCINOGEN 28064-14-4 Bisphenol F Epoxy Resin NE NE 40-60 NO Epoxy Phenol Novolac 28064-14-4 NE NE 20 - 40NO Resin 100-51-6 NE NENO Benzyl Alcohol

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 Not determined VAPOR DENSITY Not determined VAPOR PRESSURE 1 mm Hq @ 200° F

0.00 VOC SOLUBILITY IN WATER NIL

APPEARANCE AND ODOR Moderately viscous pigmented

liquid with a mild odor

SPECIFIC GRAVITY (H20=1) 1.51

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: >200° F METHOD USED: Closed Cup

FLAMMABLE LIMITS IN AIR BY VOLUME LOWER: Not determined **UPPER:** Not determined

EXTINGUISHING MEDIA: Foam, dry chemical CO 2

OSHA FLAMMABILITY CLASSIFICATION: Combustible liquid, Class III A SPECIAL FIRE FIGHTING PROCEDURES: Decomposition and/or products of combustion may be toxic. Use self contained breathing equipment. UNUSUAL FIRE AND EXPLOSION HAZARDS: Decomposition and combustion products may be toxic.

SECTION 5: REACTIVITY DATA

STABILITY: Normally Stable

CONDITIONS TO AVOID: Elevated temperatures.

INCOMPATIBILITY (MATERIALS TO AVOID): Avoid contact with strong oxidizing agents, strong acids, strong bases. Mixing large

quantities (1 gallon) with amines or epoxy hardeners can cause heat

build-up and hazardous reaction.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Carbon Monoxide, Carbon

Dioxide, Phenolic Derivatives.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 6: HEALTH HAZARD DATA

HEALTH RISKS AND SYMPTOMS OF EXPOSURE:

INHALATION: Exposure to vapors at elevated temperatures may cause irritation to respiratory tract and difficulty breathing.

EYE: May cause irritation to the eyes.

SKIN: A single exposure to the skin is unlikely to result in harm.

SKIN ABSORPTION: Repeated exposure to the skin can cause

sensitization.

INGESTION: Oral toxicity is low. No hazards expected from normal
industrial exposure.

HEALTH HAZARDS (ACUTE AND CHRONIC):

CARCINOGENICITY:

NTP CARCINOGEN: NO IARC MONOGRAPHS: NO OSHA REGULATED: NO MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Allergy, Eczema, or skin conditions.

EMERGENCY AND FIRST AID PROCEDURES:

EYES: Flush at once with potable water for at least 15 minutes.

SKIN: Wash with soap and warm water. Remove contaminated clothes.

Wash before reuse. Destroy contaminated shoes.

INGESTION: Not likely to occur in normal handling. Give large
 quantities of water and get medical attention.

INHALATION: Remove to fresh air. Administer oxygen if breathing is
 difficult.

SECTION 7: PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Avoid contact. Soak up with clay or other absorbent material. Place in covered container for disposal.

WASTE DISPOSAL METHOD: Dispose in an approved incinerator or an approved landfill.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Avoid contact.

OTHER PRECAUTIONS: Keep containers tightly closed when not in use. If mixture of A and B are allowed to remain in the mixing vessel past the pot life deadline, heat and a strong reaction will result. Grinding or other abrasive action to cured film may develop Micro crystalline Silica dust. Wear a dust mask during such operations.

SECTION 8: CONTROL MEASURES

RESPIRATORY PROTECTION: Avoid breathing vapor mist or spray.

VENTILATION: Use with good ventilation.

PROTECTIVE GLOVES: Wear impervious gloves.

EYE PROTECTION: Wear splash-proof chemical goggles.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Provide eye fountain and safety shower.

WORK/HYGIENIC PRACTICES: Practice good industrial hygiene. Wash with soap and water before eating, smoking, or using the restroom.

SECTION 9: REGULATORY INFORMATION

SARA TITLE III SECTION 313: Unless shown below, this product does not contain 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

PROP 65 (CARCINOGEN): Unless shown below, this product does not contain chemicals known to the state of California to cause cancer.

CAS # Chemical Name Percent by Weight

PROP 65 (TERATOGENIC): Unless shown below, this product does not contain chemicals known to the state of California to cause birth defects or other reproductive harm.

CAS # Chemical Name Percent by Weight

PROP 65 (CARCINOGENIC & TERATOGENIC): Unless shown below, this product does not contain chemicals known to the state of California to cause cancer or birth defects or other reproductive harm.

CAS # Chemical Name Percent by Weight
None

HAZARDOUS WASTE INFORMATION: Unless shown below, this product is not a hazardous waste according to definitions found in CFR-40.

STATE OF MICHIGAN CRITICAL MATERIALS: Unless shown below, this product does not contain ingredients appearing on the State of Michigan Critical Materials List.

CAS # Chemical Name Percent by Weight

None

D.O.T. PROPER SHIPPING NAME: Synthetic Resin Liquid
 PROPER SHIPPING NAME: Synthetic Resin Liquid

HAZARD CLASS: non-hazardous

UN/NA ID NUMBER:

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.

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: EPOXY.COM #676 100% SOLIDS CONDUCTIVE NOVOLAC EPOXY PART B

HMIS CODES: FRP Н **PRODUCT CODE:** EPOXY.COM #676B- CLEAR

SECTION 1: MANUFACTURER IDENTIFICATION

3 1 0 C

MANUFACTURER'S NAME: EPOXY SYSTEMS, INC.

ADDRESS: 20774 West Pennsylvania Ave.

Dunnellon, FL 34431

EMERGENCY NUMBER: -800-633-8253 **DATE PRINTED:** 04/13/10 **INFORMATION NUMBER:** 1-352-489-1666 PREPARER: KATE FONTAINE

SECTION 2: HAZARDOUS INGREDIENTS

ACGIH

HAZARDOUS COMPONENTS	CAS NUMBER	OSHA PEL	TLV	WT %	CARCINOGEN
Benzyl Alcohol	100-51-6	NE	NE	20-40	NO
Trimethylhexanediamine	3236-53-1	NE	NE	1-10	NO
Isophoronediamine	2855-13-2	NE	NE	20-40	NO
Triethylene Tetramine	112-24-3	NE	NE	1-10	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 POINT 414° F VAPOR DENSITY NE VAPOR PRESSURE NE VOC 0.00

SOLUBILITY IN WATER <1% @ 77° F

APPEARANCE Low viscosity with sharp ammonia

odor

SPECIFIC GRAVITY (H20=1) 0.99 EVAPORATION RATE NE

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: >200° F METHOD USED: Closed Cup

FLAMMABLE LIMITS IN AIR BY VOLUME LOWER: Not determined UPPER: Not determined

EXTINGUISHING MEDIA: Foam, dry chemical, CO2

OSHA FLAMMABILITY CLASSIFICATION: Combustible liquid, Class III B SPECIAL FIRE FIGHTING PROCEDURES: Wear positive pressure self

contained breathing equipment. Use water to cool containers exposed

to fire.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Toxic fumes present when this material involved in fire. Containers may rupture.

SECTION 5: REACTIVITY DATA

STABILITY: Normally Stable.

CONDITIONS TO AVOID: Contact with acids such as Hydrochloric or Sulfuric.

INCOMPATIBILITY (MATERIALS TO AVOID): Avoid strong oxidizing agents and epoxy resins under uncontrolled conditions.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: When exposed to fire, oxides of Carbon and Nitrogen will be generated.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 6: HEALTH HAZARD DATA

HEALTH RISKS AND SYMPTOMS OF EXPOSURE:

INHALATION: Vapors can cause severe irritation of respiratory
 tract.

SKIN: Corrosive - Can cause burns to skin.

EYE: Vapors - Can cause irritation and burns to eyes.

INGESTION: Can cause severe damage to mouth and throat.

HEALTH HAZARDS (ACUTE AND CHRONIC):

CARCINOGENICITY:

NTP CARCINOGEN: NO IARC MONOGRAPHS: NO OSHA REGULATED: NO MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Skin contact may aggrevate existing dermatitis (skin condition). Over exposure to vapor or mist may aggrevate existing respiratory conditions such as asthma, bronchitis, or fibrotic respiratory disease.

EMERGENCY AND FIRST AID PROCEDURES:

EYES: Flush immediately for 15 minutes with large amounts of potable water. $\underline{\text{DO NOT}}$ attempt to neutralize with chemical agents. Get immediate medical attention.

SKIN: Flush immediately for 15 minutes with potable water. <u>DO NOT</u> attempt to neutralize with chemical agents. Remove contaminated clothing. Launder before reuse. Discard contaminated shoes. Get medical attention if swelling and/or irritation occurs.

INGESTION: Give water to dilute stomach contents. DO NOT induce
 vomiting. If vomiting occurs, give fluids again. Get immediate
 medical attention. Do not give anything by mouth to an
 unconscious or convulsing person.

INHALATION: Remove to fresh air. Get medical attention if effects
 persist.

OTHER INSTRUCTIONS: Swallowing this corrosive material may result in severe ulceration, inflamation, and possible perforation of the upper alimentary tract, with hemorrhage and fluid loss. Aspiration of this product during induced emesis can result in severe lung injury. If evacuation of stomach is necessary, use method least likely to cause aspiration, such as gastric lavage after endotracheal intubation. Contact a Poison Control Center for additional treatment information.

SECTION 7: PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Avoid contact. Allow only personnel wearing goggles, neoprene or rubber gloves and protective clothing to clean up spill. In confined areas a full face respirator is recommended. Absorb spill with clay, diatomaceous earth or other absorbent material. Place in disposal containers.

WASTE DISPOSAL METHOD: Dispose of in approved incinerator or an approved landfill.

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

OTHER PRECAUTIONS: none

SECTION 8: CONTROL MEASURES

RESPIRATORY PROTECTION: If vapor or mist is generated and the occupational exposure limit is exceeded, use appropriate NIOSH/MSHA

approved self contained breathing equipment or a full face respirator.