

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: Epoxy Systems' Product #3 Injection BINDER PART A
PRODUCT CODE: 3 - "A"

HMIS CODES: H F R P
1 1 0 B

SECTION 1: MANUFACTURER IDENTIFICATION

MANUFACTURER'S NAME: Epoxy Systems, Inc.
ADDRESS: 9370 SW 208th Cir
Dunnellon, FL 34431

EMERGENCY NUMBER: 1-800-633-8253
INFORMATION NUMBER: 1-352-489-1666

DATE PRINTED: December 6, 2002
PREPARER: N. Lambert

SECTION 2: HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENTS	CAS NUMBER	OSHA PEL	ACGIH TLV	WT %	CARCINOGEN
Epoxy Resin	25068-38-6	NE	NE	60-80	NO
Alkyl Glycidyl Ether	120547-52-6	NE	NE	1-10	
Alkyl Phenol	84852-15-3	NE	NE	1-10	NO
Benzyl Alcohol	100-51-6	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	Above 400 degrees F
VAPOR DENSITY	Approx. 3.5 (Air = 1)
VAPOR PRESSURE	Less than 1 mm Hg @ 100 degrees F
VOC	0.00
SOLUBILITY IN WATER	Very slight
APPEARANCE AND ODOR	Low viscosity clear liquid with a mild, pleasant aroma
SPECIFIC GRAVITY (H20=1)	1.11

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: >200 degrees 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 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.

SECTION 5: REACTIVITY DATA (CON'T)

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 OSRA 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.

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 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
106-89-8	Epichlorohydrin	trace

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
	None	

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
	None	

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 Systems' Product #3 Injecton BINDER PART B
PRODUCT CODE: Epoxy System' Product #3

HMS CODES: H F R P
3 1 0 C

SECTION 1: MANUFACTURER IDENTIFICATION

MANUFACTURER'S NAME: Epoxy Systems, Inc.
ADDRESS: 9370 SW 208th Cir Dunnellon, FL 34431
EMERGENCY NUMBER: 1-800-663-8253 DATE PRINTED: December 6, 2002
INFORMATION NUMBER: 352-489-1666 PREPARER: N. Lambert

SECTION 2: HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENTS	CAS NUMBER	OSHA PEL	ACGIH TLV	WT %	CARCINOGEN
TOFA	68953-36-6	NE	NE	10-20	No
Tetraethylenepentamine	112-57-2	NE	NE	5-15	NO
Diethylenetriamine	111-40-0	1 ppm	4 mg/m ³	1-5	NO
Bisphenol A	80-05-7	NE	NE	1-5	NO
Tris 2,4,6 (Dimethylaminomethyl) Phenol	90-72-2	NE	NE	1-5	NO
Benzyl Alcohol	100-51-6	NE	NE	5-15	NO
Alkyl Phenol	84852-15-3	NE	NE	40-60	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	>300° F
VAPOR DENSITY	NE
VOC	0.00
SOLUBILITY IN WATER	Slight
APPEARANCE AND ODOR	Amber liquid with slight ammoniacal odor
SPECIFIC GRAVITY (H ₂ O=1)	0.99
EVAPORATION RATE	N/A

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: >200 degrees 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 COMBUSTABLE liquid, Class III B

SPECIAL FIRE FIGHTING PROCEDURES: Wear positive pressure self contained

breathing equipment. Use water to cool containers exposed to fire. Water may be an ineffective extinguishing agent.

UNUSUAL FIRE MID EXPLOSION HAZARDS: Vapors are heavier than air and may travel along the ground or be moved by ventilation to ignition sources at locations distant from material handling point. Pressure may build up in containers and create an explosion hazard.

SECTION 5: REACTIVITY DATA

STABILITY: Stable

CONDITIONS TO AVOID: Not applicable

INCOMPATIBILITY (MATERIALS TO AVOID): Oxidizing agents, strong acids or bases HAZARDOUS

DECOMPOSITION OR BY-PRODUCTS: Carbon monoxide, carbon dioxide,
nitrogen oxides and organic compounds

HAZARDOUS POLYMERIZATION: Will not occur

SECTION 6: HEALTH HAZARD DATA

HEALTH RISKS AND SYMPTOMS OF EXPOSURE:

INHALATION: Headache, nausea, respiratory tract irritant.

SKIN: Severe irritation and possible skin sensitizer.
EYE: Can cause irritation, burning, tearing, redness, swelling and possible chemical burns to the eyes.
SKIN ABSORPTION: Can cause chemical burns, redness and swelling.
INGESTION: Abdominal pain, nausea, vomiting, diarrhea, throat and mouth burns.

HEALTH HAZARDS (ACUTE AND CHRONIC):

CARCINOGENICITY:

NTP CARCINOGEN: NO IARC MONOGRAPHS: NO OSHA REGULATED: NO MEDICAL

CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Skin contact may

aggravate existing dermatitis (skin condition). Over exposure to vapor or

mist **may aggravate 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. DO NOT attempt to neutralize with chemical agents. Get immediate medical attention.

SKIN: Flush immediately for 15 minutes with potable water. DO NOT 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, inflammation, 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.

SECTION 7: PRECAUTIONS FOR SAFE HANDLING AND USE (CON'T) 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.

VENTILATION: Mechanical ventilation required if TLV is expected to be exceeded in confined areas.

PROTECTIVE GLOVES: Neoprene or natural rubber gloves

EYE PROTECTION: Chemical goggles

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Body covering clothes

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 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
	None	

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

CAS#	Chemical Name	Percent by Weight
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None

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
	None	

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	

SECTION 9: REGULATORY INFORMATION (CONT)

D.O.T. PROPER SHIPPING NAME: Caustic Alkali Liquid, N.O.S, (Modified Amido Amines); 8; UN1719; PG III

PROPER SHIPPING NAME: Caustic Alkali Liquid, N.O.S. (Modified Amido Amines)

HAZARD CLASS: Class 8, Corrosive

UN/NA ID NUMBER: UN 1719

PACKING GROUP III

SECTION 10: DISCLAIMER

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