



**SECTION 3 Physical Data**

BOILING/MELTING POINT.....>400 Degrees F.  
 VAPOR PRESSURE mm Hg @20 degrees C..... Less than 1 mm HG @ 100  
 Degrees F.  
 VAPOR DENSITY (Air= 1)..... Heavier than air  
 PERCENT VOLATILE BY VOLUME (%)..... 0.00  
 Voc (lbs/gal)..... 0.00  
 SPECIFIC GRAVITY OR BULK DENSITY..... 1.11  
 SOLUBILITY IN WATER..... Very Slight  
 EVAPORATION RATE (BuAc = 1)..... slower than N-Butyl acetate  
 APPEARANCE..... Low viscosity clear liquid  
 ODOR..... Mild pleasant aroma

**SECTION 4**

**FIRE AND EXPLOSION HAZARD DATA**

FLASH POINT Degrees F (Test Method).... >200 F (SFCC)  
 AUTOIGNITION TEMPERATURE..... Not determined  
 FLAMMABILITY LIMITS IN AIR (% V)..... Not determined  
 EXTINGUISHING MEDIA..... Carbon dioxide, dry chemical, water  
 spray, alcohol foam  
 SPECIAL FIRE FIGHTING PROCEDURES..... Firefighters and others exposed to  
 vapors or products of combustion  
 should wear self contained  
 breathing apparatus and full  
 protective clothing.  
 UNUSUAL FIRE & EXPLOSION HAZARDS..... Closed containers could rupture  
 violently when exposed to the  
 elevated temperatures of fire  
 conditions.

**SECTION 5**

**HEALTH HAZARD DATA – EFFECTS OF OVEREXPOSURE**

SKIN CONTACT..... Prolonged or repeated contact of product with skin may cause irritation, and could result in dermatitis. May cause sensitization or other allergic responses.

EYE CONTACT..... Direct contact of product with eyes can cause irritation.

INHALATION..... Heating can generate vapors that could cause headaches, nausea, dizziness, and respiratory irritation if inhaled.

INGESTION..... Slightly toxic.

CHRONIC EFFECTS  
OF OVEREXPOSURE..... Neopentyl Glycol Diglycidyl Ether was found to be carcinogenic in skin painting tests on mice. This material has been reported to be mutagenic (causes changes in genetic system) in some laboratory animals.

TOXICOLOGICAL  
TEST DATA..... oral LD50 - (rat) - approximately 4000 mg/kg.

**SECTION 6**

**EMERGENCY AND FIRST AID PROCEDURES**

SKIN..... Wash affected areas with water while removing contaminated clothing. Launder contaminated clothing before reuse.

EYES..... Flush eyes with generous amounts of water for at least 15 minutes. Get immediate medical attention.

INGESTION..... If swallowed, DO NOT INDUCE VOMITING. Dilute with water and call a physician immediately. Never give fluids or induce vomiting if the victim is unconscious or having convulsions.

INHALATION..... Move to fresh air. Aid in breathing, if necessary, and Get immediate medical attention.

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**SECTION 7**

**REACTIVITY DATA**

PRODUCT STABILITY..... Stable

CONDITIONS TO AVOID..... NA

CHEMICAL INCOMPATIBILITY..... Strong acids or bases in bulk

HAZARDOUS DECOMPOSITION PRODUCTS.. Carbon monoxide, carbon dioxide, aldehydes

HAZARDOUS POLYMERIZATION..... Will not occur

CONDITIONS TO AVOID..... NA

CORROSIVE TO METAL..... No

OXIDIZER..... No

**SECTION 8**

**SPECIAL PROTECTION INFORMATION**

RESPIRATORY PROTECTION..... NIOSH/MSHA approved organic vapor respirator when vapors are generated above the permissibly limit.  
VENTILATION..... good general mechanical ventilation and local exhaust.  
PROTECTIVE CLOTHING..... impervious plastic gloves, coveralls, aprons, boots - as necessary to prevent skin contact.  
EYE PROTECTION.... Safety glasses with side shields or chemical goggles.  
OTHER PRECAUTIONS..... Wash thoroughly before eating, drinking, or smoking. A safety eye wash facility should be available.

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**SECTION 9**

**ENVIRONMENTAL DATA**

SPILL OR LEAK PROCEDURES..... soak up with inert material. Scrape into suitable containers. wash area with warm soapy water.  
WASTE DISPOSAL METHOD..... Incineration in accordance with all local, state, and federal regulations.  
HAZARDOUS WASTE 40CFR261..... No

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**SECTION 10**

**SHIPPING DATA**

D.O.T. PROPER SHIPPING NAME..... Synthetic Resin Liquid  
D.O.T. HAZARD CLASS..... Synthetic Resin Liquid  
PACKING GROUP..... None  
POISON CONSTITUENT..... None  
BILL OF LADING DESCRIPTION..... NMFC 100-H ITEM 46030 CLASS 55  
UN/NA CODE..... None  
HAZARD CLASS..... None-hazardous

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**SECTION 11**

**SUPPLIER INFORMATION**

While Epoxy Systems, Inc. believes the data set forth herein are accurate as of the date hereof. Epoxy Systems, Inc., makes no warranty, expressed or implied, with respect thereto and expressly disclaims all liability for reliance thereon. Such data are offered solely for your consideration, investigation, and verification.

# MATERIAL SAFETY DATA SHEET

Epoxy.com PRODUCT #17 "B"

Epoxy Systems, Inc.  
20774 West Pennsylvania Ave.  
Dunnellon, FL 34431

## EMERGENCY TELEPHONE NO.:

352-489-1666

## Information:

352-489-1666

## Section I - Product Identification

**Latest Revision date:** December 2008

**Product Name or Number:** 17 "B"

**Trade Name or Chemical Name:** Epoxy Systems™ Product #17 "B" Hardener

**Synonyms:** Hardener for resin

**Formula:** NA

**Chemical Family:** Amines

**Molecular Weight:** NA

**HMIS Rating:** Health-3 Fire-1 Reactivity-0

Prepared by: N. Lambert

## SECTION II -- HAZARDOUS INGREDIENTS

**Hazardous Components:** TLV-TWA PEL Sec.313 %

084852-15-3	Nonylphenol	NA	NA	No	40-50
009046-10-0	Polyoxyalkyleneamine	NA	NA	No	40-50
000140-31-8	N-Aminoethylpiperazine	NA	NA	No	5-15

Information for mixtures is based on constituent MSDS which are available upon request. (Minus Proprietary Trade Names).

## SECTION III -- PHYSICAL DATA

**Boiling/Melting Point @ 760 mm Hg:** >200° C

**Vapor Pressure mm Hg @ 20° C:** Not determined

**Vapor Density (Air = 1):** Heavier than Air

**Percent Volatile by Volume (%):** Nil

**VOC (lbs /gal):** Nil

**Specific Gravity or Bulk Density (H<sub>2</sub>O = 1):** 0.95

**Solubility In Water:** slight

**Evaporation Rate (BuAc =1):** Slower than N-Butyl acetate

**Appearance:** Clear liquid

**Odor:** Ammoniacal odor

## **SECTION IV -- FIRE AND EXPLOSION HAZARD DATA**

**Flash point (Test Method):** >200°F Closed Cup

**Autoignition Temperature:** Not determined

**Flammability Limits in Air (% V):** Not determined

**Extinguishing Media:** Dry chemical, carbon dioxide, water spray, alcohol foam.

**Special Fire Fighting Procedures:** Fire fighters and others exposed to vapors or products of combustion should wear self-contained breathing apparatus and full protective clothing.

**Unusual Fire and Explosion Hazards:** Closed containers could rupture violently when exposed to the elevated temperatures of fire conditions.

## **SECTION V -- Health Hazard Data \* Effects of Overexposure**

**Skin Contact:** Corrosive. Is a known skin sensitizer. Toxic by skin absorption.

**Eyes:** Corrosive.

**Inhalation:** Toxic. Severe respiratory tract irritant.

**Ingestion:** Toxic. May cause burns and bleeding of the gastrointestinal tract.

**Chronic Effects of Overexposure:** Over exposure to this material can cause chemical burnes to the skin and permanent blindness to the eyes. Overexposure to a constituent component of this material, can be fatal if ingested, inhaled or absorbed through the skin.

### **Toxicological**

**Test Data:**  
Oral LD50 - (rat) - 1600 mg/kg for component for nonylphenol  
Oral LD50 (rat) - 2880 mg/kg for polyoxyalkyleneamine  
Oral LD50 (rat) - 2140 mg/kg for N-aminoethyl piperazine.  
Dermal LD50 - (rabbit) - > 2000 mg/kg for nonylphenol  
Dermal LD50 - (rabbit) - 2980 mg/kg for polyoxyalkyleneamine



**Work/ Hygienic Practices:** DO NOT eat, drink or smoke while using this product.

**SECTION IX -- Environmental Data:**

**Spill or Leak Procedures:** Soak up with inert material and scrape up into suitable containers.  
Wash area with warm soapy water.

**Waste Disposal Method:** Incineration in accordance with all Federal, State and Local  
Regulations for Hazardous Materials.

**Hazardous Waste 40CFR261:** characteristic waste - corrosive

**SECTION X -- Shipping Data:**

**D.O.T. Proper Shipping Name:** Hardener Solution

**D.O.T. Hazard Class:** Not regulated by D.O.T., Hardener Compound, none, N.A

**Poison Constituent:** Unknown

**Bill of Lading Description:** Class 55

**UN/NA Code:** none

**SECTION XI -- Supplier Information:**

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