

SAFETY DATA SHEET

Epoxy.com Product #671 PART B HARDENER

Page 1 – 10/12/2017

1. Product and Company Identification

Product Code: 671-B
Product Name: Epoxy.com #671 Conductive PART B
Company Name: Epoxy Systems, Inc.
20774 West Pennsylvania Ave
Dunnellon, Florida 34431

Phone Number:
(352) 489-1666

Emergencies Involving Spills, Leaks
Fires, Exposures, or Accidents

Emergency Contact: PERS 800-633-8253 International +1-801-629-0667

2. Hazards Identification

Skin Sensitization, Category 1
Flammable Liquids, Category 2
Acute Toxicity: Skin, Category 4
Skin Corrosion/Irritation, Category 2
Acute Toxicity: Inhalation, Category 4
Target Organ Systemic Toxicity (repeated exposure), Category 2
Target Organ Systemic Toxicity (single exposure), Category 3



GHS Signal Word:

Danger

GHS Hazard Phrases:

H317 – May cause an allergic skin reaction.
H226 – Flammable liquid and vapor.
H312 – Harmful in contact with skin.
H315 – Causes skin irritation.
H332 – Harmful if inhaled.
H373 – May cause damage to organs through prolonged or repeated exposure.
H335 – May cause respiratory irritation.

GHS Precaution Phrases:

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
P272 - Contaminated work clothing should not be allowed out of the workplace.
P280 - Wear protective gloves/protective clothing/eye protection.
P233 - Keep container tightly closed.
P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
P241 - Use explosion-proof electrical/ventilating/lighting equipment.
P243 - Take precautionary measures against static discharge.
P242 - Use only non-sparking tools.
P264 - Wash hands thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.

GHS Response Phrases:

P303+361+353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
P332+313 - If skin irritation occurs, get medical advice/attention.
P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+313 - If eye irritation persists, get medical advice/attention.
P301+330+331 – IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Get medical aid.
P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention.

GHS Storage and Disposal Phrases:

P370+378 - In case of fire, use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam.
P403+235 – Store in cool/well-ventilated place. Store locked up.
P501-Contact a licensed professional waste disposal service to dispose of this material.

Epoxy.com #671 PART B/PAGE 2

Potential Health Effects

(Acute and Chronic):

Inhalation:

Chronic inhalation may cause effects similar to those of acute inhalation.

Material is irritating to mucous membranes and upper respiratory tract. Harmful if inhaled. Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma. Vapors may cause dizziness or suffocation.

Skin Contact:

May be harmful if absorbed through the skin. Prolonged and/or repeated contact may cause irritation and/or dermatitis.

Eye Contact:

Causes eye irritation. Causes redness and pain.

Ingestion:

May be harmful if swallowed. May be harmful if inhaled.

May cause irritation of the digestive tract. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure. Aspiration of material into the lungs may cause chemical pneumonitis, which may be fatal.

3. Composition on Ingredients

CAS #	Hazardous Components (Chemical Name)	Concentration
1330-20-7	Xylene (mixed isomers)	55.0 – 65.0%
Proprietary	Epoxy resin hardener	20.0 – 30.0%
1333-86-4	Carbon Black	10.0 – 15.0%
100-41-4	Ethylbenzene	5.0 – 10.0%
67-63-0	Isopropyl Alcohol	1.0 – 5.0%

4. First Aid Measures

Emergency and First Aid Procedures:

In Case of Inhalation:

If inhaled, remove to fresh air. If breathing is difficult, give oxygen. Remove from exposure and move to fresh air immediately. Get medical aid.

In Case of Skin Contact:

Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. If skin irritation occurs, get medical attention.

In Case of Eye Contact:

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

In Case of Ingestion:

Never give anything by mouth to an unconscious person. Rinse mouth with water. Get medical aid.

Signs and Symptoms of Exposure:

Central nervous system depression. Dermatitis. Abdominal pain, Nausea. Vomiting, Anorexia. Shortness of breath. Get medical aid.

Note to Physician:

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area. Treat symptomatically and supportively.

5. Fire Fighting Measures

Suitable Extinguishing Media:

Use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

Fire Fighting Instructions:

Use water spray to cool unopened containers. Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Specific Hazard(s): Flammable Liquid. Emits toxic fumes under fire conditions. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Flammable liquid and vapor. Vapors are heavier than air and may travel to a source of ignition and flash back. Vapors can spread along the ground and collect in low or confined areas.

Flammable Properties and Hazards:

Vapor may travel considerable distance to source of ignition and flash back. Container explosion may occur under fire conditions. Forms explosive mixtures in air.

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled:

Use personal protective equipment.

Spills/Leaks: Control runoff and isolate discharged material for proper disposal. Use water spray to cool and disperse vapors and protect personnel.

Epoxy.com #671 PART B PAGE 3

7. Handling and Storage

Precautions To Be Taken in Handling:

Avoid contact with skin and eyes. Normal measures for preventive fire protection. Avoid inhalation of vapor or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build-up of electrostatic charge.

Precautions To Be Taken in Storing:

Containers which are opened must be carefully resealed and kept upright to prevent leakage. Suitable: Keep away from heat, sparks, and open flame.

8. Exposure Controls/Personal Protection

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA
Proprietary 1330-20-7	Epoxy resin hardener Xylene (mixed isomers)	N/E PEL: 100 ppm	N/E TLV: 100 ppm STEL: 150 ppm
100-41-4 67-63-0	Ethylbenzene Isopropyl Alcohol	PEL: 100 ppm PEL: 400 ppm	TLV: 100 ppm TLV: 200 ppm STEL: 400 ppm
1333-86-4	Carbon Black	PEL: 3.5 mg/m ³	TLV: 3.0 mg/m ³

Respiratory Equipment (Specify Type):

For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls.

Eye Protection:

Safety glasses with side shield. For a higher degree of protection, wear chemical splash goggles.

Protective Gloves:

Wear appropriate protective gloves to prevent skin exposure, such as butyl rubber or nitrile rubber.

Other Protective Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Engineering Controls (Ventilation etc.):

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Work/Hygienic/Maintenance Practices:

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Wash thoroughly after handling. Wash contaminated clothing before reuse.

9. Chemical and Physical Properties

Physical States:	<input type="checkbox"/> Gas	<input checked="" type="checkbox"/> Liquid	<input type="checkbox"/> Solid
Boiling Point:	181°F		
Flash Pt:	53°F		
Explosive Limits:	LEL: 1.0	UEL: 12.0	
Weight Per Gallon:	7.90 +/- .3		
Vapor Pressure (mm Hg):	33 @ 68°F		
Vapor Density:	Heavier than air		
Evaporation Rate:	Slower than Ether		
Percent Volatile:	70 (vol.)		

10. Stability and Reactivity

Stability:	Unstable <input type="checkbox"/>	Stable <input checked="" type="checkbox"/>
Conditions To Avoid – Instability:	Heat, flames and sparks	
Incompatibility – Materials To Avoid:	Bases, Strong oxidizing agents.	
Hazardous Decomposition Or Byproducts:	Nature of decomposition products unknown.	
Possibility of Hazardous Reactions:	Will occur <input type="checkbox"/>	Will not occur <input checked="" type="checkbox"/>
Conditions To Avoid – Hazardous Reactions:	Vapors may form explosive mixture with air. Carbon monoxide, Carbon dioxide.	

11. Toxicological Information

Toxicological Information: No data available
Irritation or Corrosion: No data available.
Sensitization: No data available.
Carcinogenicity/Other Information: Carcinogenicity.
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. This product contains the following substances known to the State of California to cause cancer, birth defects, or other reproductive hazards: Benzene, Toluene .

12. Ecological Information

General Ecological Information: No data available.
Persistence and Degradability: No data available.
Bioaccumulative Potential: No data available.
Mobility in Soil: No data available

13. Disposal Considerations

Waste Disposal Method: Dispose of as unused product. Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

14. Transport Information

LAND TRANSPORT (US DOT):
DOT Proper Shipping Name: UN1263, Paint Related Material, 3, PG II



Marine Transport
IMDG Shipping Name: UN1263, Paint Related Material, 3, PG II



AIR TRANSPORT (ICAO/IATA):
IATA Shipping Name: UN1263, Paint Related Material, 3, PG II



15. Regulatory Information

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
Proprietary	Epoxy resin hardener	No	No	No
1330-20-7	Xylene (mixed isomers)	No	Yes 100 LB	Yes
100-41-4	Ethylbenzene	No	Yes 1000 LB	Yes
67-63-0	Isopropyl Alcohol	No	No	Yes
1333-86-4	Carbon Black	No	No	No

V.O.C (mixed) 4.21 LBS/GL (504 GMS/L)

16. Other Information

Revision Date 10/12/2017

Additional Information About This Product:

Hazardous Material Information System III (U.S.A)

Health: 2*
Flammability: 2
Reactivity: 0
Personal Protection: *

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by Epoxy Systems, Inc. and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.