

**1. PRODUCT AND COMPANY IDENTIFICATION**

<b>Product Name:</b> Tuffbond <sup>®</sup> 42691	<b>Product Type:</b> Epoxy Adhesive
<b>Company :</b> Hernon Manufacturing, Inc. 121 Tech Drive Sanford, FL 32771	<b>Contact Information:</b> Telephone: 407-322-4000 Emergency Telephone: 800-255-3924 Web Site: www.hernonmfg.com

**2. HAZARDS IDENTIFICATION**

**EMERGENCY OVERVIEW**

Physical state: Liquid  
 Color: Black  
 Odor: Unpleasant

**HMIS:**  
 HEALTH: 2\*  
 FLAMMABILITY: 1  
 PHYSICAL HAZARD: 1  
 Personal Protection: See Section 8

**WARNING:** HARMFUL IF INHALED.  
 MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.

**Primary Routes of Entry:** Skin, inhalation, eyes

**Signs and Symptoms of Exposure:**

**Inhalation:** This material does not normally present an inhalation hazard, however, in applications where vapors (caused by high temperatures) or mists (caused by mixing) are created, breathing may cause a mild burning sensation in the nose, throat and lungs.

**Eye Contact:** May cause temporary discomfort or irritation to the eye. Contact with hot material can cause thermal burns which may result in permanent damage or blindness.

**Skin Contact:** May be slightly irritating to the skin. Repeated skin contact may result in an allergic skin reaction causing itching, burning, redness, and swelling. Contact with hot matter can cause thermal burns which may result in permanent damage.

**Ingestion:** Not expected to be a relevant route of exposure.

**Existing Conditions Aggravated by Exposure:** Eye, skin, and respiratory disorders.

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

<u>Ingredients</u>	<u>%</u>	<u>ACGIH TLV</u>	<u>OSHA PEL</u>	<u>OTHER</u>
Epoxy resin	70-100	None	None	None
Amine adduct	10-20	None	None	None
Carbon black	< 0.1	3.5 mg/m <sup>3</sup> TWA	3.5 mg/m <sup>3</sup> TWA	3.5 mg/m <sup>3</sup> TWA

4. FIRST AID MEASURES	
<b>Ingestion:</b>	Do not induce vomiting. Keep individual calm. Obtain medical attention.
<b>Inhalation:</b>	Remove to fresh air. If symptoms develop and persist, get medical attention.
<b>Skin Contact:</b>	Wash with soap and water. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention if symptoms occur.
<b>Eye Contact:</b>	Flush with water for at least 15 minutes. Get medical attention.
5. FIRE FIGHTING MEASURES	
<b>Flash Point (TCC):</b>	> 200°F
<b>Recommended Extinguishing Agents:</b>	Carbon dioxide, foam, dry chemical
<b>Special Firefighting Procedures:</b>	Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear. Water may be used to cool closed containers. High pressure stream will spread fire.
<b>Hazardous Combustion Products:</b>	Irritating organic vapors
<b>Unusual Fire or Explosion Hazards:</b>	None
<b>Flammable/Explosive Limits – lower %:</b>	NA
<b>Flammable/Explosive Limits – upper %:</b>	NA
6. ACCIDENTAL RELEASE MEASURES	
<b>Personal Precautions:</b>	Wear proper protective equipment
<b>Measures for Environmental Protection:</b>	Do not allow entry into drains or surface waters
<b>Clean-up Measures:</b>	Soak up with an inert absorbent. Store in partly filled, closed container until disposal.
7. HANDLING AND STORAGE	
<b>Handling:</b>	Avoid contact with eyes, skin and clothing. Avoid breathing vapor and mist. Wash thoroughly after handling. Use only with adequate ventilation.
<b>Storage:</b>	Keep refrigerated
8. EXPOSURE CONTROLS, PERSONAL PROTECTION	
<b>Eye/Face Protection:</b>	Safety glasses or goggles with side shields
<b>Skin Protection:</b>	Use rubber or plastic gloves, and protective clothing as necessary
<b>Respiratory Protection:</b>	Use NIOSH approved respirator if there is a potential to exceed exposure limits
<b>Engineering Controls:</b>	Forced ventilation may be required if concentrations exceed exposure limits

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Physical State:** Liquid  
**Color:** Black  
**Odor:** Unpleasant  
**Vapor Pressure:** < 5 mm at 80°F  
**Vapor Density:** Not available  
**Solubility in Water:** Slight  
**Specific Gravity:** 1.19  
**Boiling Point:** More than 300°F  
**Volatile Organic Compound Content** 0.51%  
**Evaporation Rate (Ether = 1)** Not available  
**pH:** Does not apply

**10. STABILITY AND REACTIVITY**

**Stability:** Stable  
**Hazardous Polymerization:** Will not occur  
**Hazardous Decomposition Products:** None  
**Incompatibility:** Strong acids, bases, amines, mercaptanes, moisture

**11. TOXICOLOGICAL INFORMATION**

Ingredients:	Literature Referenced Target Organ and Other Health Effects	Carcinogen Status		
		NTP	IARC	OSHA
Epoxy resin	IRR MUT	NO	NO	NO
Amine adduct	No data	NO	NO	NO
Carbon black	RES	NO	2B	NO

**Abbreviations:**  
**IRR** Irritant   **MUT** Mutagen   **RES** Respiratory   **2B** Suspect carcinogen

**12. ECOLOGICAL INFORMATION**

**Ecological Information:** Not available

**13. DISPOSAL CONSIDERATIONS**

**Recommended methods of disposal:** Dispose of according to Federal, State and Local regulations.  
**EPA Hazardous Waste Number:** Not an RCRA hazardous waste

**14. TRANSPORTATION INFORMATION**

**U.S. Dept. of Transportation Ground (49 CFR):**

**Proper Shipping Name** Unrestricted  
**Hazard Class or Division:** None  
**Identification Number** None  
**Packing group:** None

**International Air Transportation (ICAO/IATA):**

**Proper Shipping Name:** Unrestricted  
**Hazard Class or Division:** None  
**Identification Number** None  
**Packing group:** None

**Water Transportation (IMO/IMDG):**

**Proper Shipping Name:** Unrestricted  
**Hazard Class or Division:** None  
**Identification Number** None  
**Packing group:** None  
**Marine pollutant:** None

**15. REGULATORY INFORMATION**

**United States Regulatory Information**

**TSCA 8 (b) Inventory Status:** All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory  
**CERCLA/SARA 313:** This product contains the following chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372): None  
**California Proposition 65:** This product contains a substance(s) known to the state of California to cause cancer and/or reproductive toxicity.

**16. OTHER INFORMATION**

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**Title:** Director - Quality & Development

**DISCLAIMER:** Some of the information presented is from sources other than direct test data on the product itself. The information in this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.