

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Tuffbond [®] 323B	Product Type: Hardener
Company : Hernon Manufacturing, Inc. 121 Tech Drive Sanford, FL 32771	Contact Information: Telephone: 407-322-4000 Emergency Telephone: 800-255-3924 Web Site: www.hernon.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Physical state: Liquid
 Color: Pale yellow
 Odor: Amine-like

HMIS:
 HEALTH: 3*
 FLAMMABILITY: 1
 PHYSICAL HAZARD: 1
 Personal Protection: See Section 8

WARNING: MAY CAUSE EYE, AND SKIN IRRITATION.
 MAY CAUSE ALLERGIC SKIN REACTION.
 MAY CAUSE RESPIRATORY TRACT IRRITATION.
 MAY BE HARMFUL IF SWALLOWED.

Primary Routes of Entry: Skin, Inhalation, Eyes

Signs and Symptoms of Exposure:

Inhalation: Can cause severe eye, skin and respiratory tract burns.

Skin contact: Harmful in contact with skin. Causes skin burns. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Eye contact: Causes eye burns. May cause blindness. Severe eye irritation.

Ingestion: Harmful if swallowed. If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach.

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>
Aliphatic Amines	80-90	None	None	None
Benzyl Alcohol	20-30	10 ppm TWA	None	None

4. FIRST AID MEASURES

Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Prevent aspiration of vomit. Turn victim's head to the side.

Inhalation: Remove to fresh air. If symptoms develop and persist, get medical attention.

Skin Contact: Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay. Initiate and maintain gentle and continuous irrigation until the patient receives medical care. If medical care is not promptly available, continue to irrigate for one hour. Cover wound with sterile dressing. Take off contaminated clothing and shoes immediately. NOTE TO PHYSICIANS: Application of corticosteroid cream has been effective in treating skin irritation.

Eye Contact: Hold eyelids apart, initiate and maintain gentle and continuous irrigation until the patient receives medical care. If medical care is not promptly available, continue to irrigate for one hour.

5. FIRE FIGHTING MEASURES

Flash Point (TCC): > 200°F

Recommended Extinguishing Agents: Alcohol-resistant foam, carbon dioxide, dry chemical, dry sand, limestone powder.

Special Firefighting Procedures: Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

Hazardous Combustion Products: May generate ammonia gas and toxic nitrogen oxide gases. Obnoxious and toxic fumes.

Unusual Fire or Explosion Hazards: Use of water may result in the formation of very toxic aqueous solutions. Incomplete combustion may form carbon monoxide.

Flammable/Explosive Limits – lower %: Not available

Flammable/Explosive Limits – upper %: Not available

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear proper protective equipment

Measures for Environmental Protection: Do not allow entry into drains or surface waters

Clean-up Measures: Soak up with an inert absorbent. Store in partly filled, closed container until disposal.

7. HANDLING AND STORAGE

Handling: Avoid contact with eyes, skin and clothing. Avoid breathing vapor and mist. Wash thoroughly after handling. Use only with adequate ventilation.

Storage: Store between 46° and 82°F unless otherwise labeled to preserve shelf life.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

Eye/Face Protection:	Safety glasses or goggles with side shields
Skin Protection:	Use rubber or plastic gloves, and protective clothing as necessary
Respiratory Protection:	Use NIOSH approved respirator if there is a potential to exceed exposure limits
Engineering Controls:	Forced ventilation may be required if concentrations exceed exposure limits

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid
Color:	Pale yellow
Odor:	Amine-like
Vapor Pressure:	Less than 2 mm at 70°F
Vapor Density:	Not available
Solubility in Water:	Slight
Specific Gravity:	0.99
Boiling Point:	> 300°F
Volatile Organic Compound Content	Not available
Evaporation Rate (Ether = 1)	Not available
pH:	Does not apply

10. STABILITY AND REACTIVITY

Stability:	Stable
Hazardous Polymerization:	Will not occur
Hazardous Decomposition Products:	Oxides of carbon. Oxides of nitrogen. Irritating organic vapors.
Incompatibility:	Sodium hypochlorite, organic acids, mineral acids, peroxides, reactive metals

11. TOXICOLOGICAL INFORMATION

Ingredients:	Literature Referenced Target Organ and Other Health Effects	Carcinogen Status		
		NTP	IARC	OSHA
Aliphatic Amines	COR EYE SKI	NO	NO	NO
Benzyl Alcohol	No data	NO	NO	NO

Abbreviations:

EYE Eye **SKI** Skin **COR** Corrosive

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 Amines, liquid, corrosive, n.o.s. (4,4'-Methylenebiscyclohexanamine, Nonylphenol)
Hazard Class or Division: 8
Identification Number UN 2753
Packing group: III

International Air Transportation (ICAO/IATA):

Proper Shipping Name: Amines, liquid, corrosive, n.o.s. (4,4'-Methylenebiscyclohexanamine, Nonylphenol)
Hazard Class or Division: 8
Identification Number UN 2753
Packing group: III

Water Transportation (IMO/IMDG):

Proper Shipping Name: Amines, liquid, corrosive, n.o.s. (4,4'-Methylenebiscyclohexanamine, Nonylphenol)
Hazard Class or Division: 8
Identification Number UN 2753
Packing group: III
Marine pollutant: No

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 toxic 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

16. OTHER INFORMATION

Prepared By: Jerry Litteral
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.