

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Fusionbond® 371A	Product Type: Acrylic Adhesive
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: White
Odor: Pungent, Acrylic

HMIS:
HEALTH: 2*
FLAMMABILITY: 3
PHYSICAL HAZARD: 0
Personal Protection: See Section 8

WARNING: FLAMMABLE LIQUID AND VAPOR.
MAY CAUSE ALLERGIC SKIN REACTION.
MAY BE HARMFUL IF ABSORBED THROUGH SKIN OR INHALED.
MAY CAUSE EYE, AND SKIN AND RESPIRATORY TRACT IRRITATION.

Primary Routes of Entry: Skin, inhalation, eyes

Signs and Symptoms of Exposure:

Inhalation: May be harmful if inhaled. Moderate respiratory tract irritation. Shortness of breath. Coughing.

Eye Contact: Moderate eye irritation. Redness. Excess tearing.

Skin Contact: May be harmful if absorbed through skin. May cause allergic skin reaction. Itching. Moderate skin irritation. Redness.

Ingestion: Not expected to be harmful by ingestion.

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>
Methyl Methacrylate	30-60	100 ppm STEL 50 ppm TWA	100 ppm TWA 410 mg/m³ TWA	50 ppm
Synthetic Rubber	20-30	None	None	None
Methacrylic Acid	10-15	20 ppm TWA	None	None
Polyglycol Dimethacrylate	1-3	None	None	None
Tert-butyl perbenzoate	1-3	None	None	None
Fumed Silica	1-3	6 mg/m³TWA	10 mg/m³ TWA	3 mg/m³TWA respirable

4. FIRST AID MEASURES	
Ingestion:	Do not induce vomiting. Keep individual calm. Obtain medical attention.
Inhalation:	Remove to fresh air. If symptoms develop and persist, get medical attention.
Skin Contact:	Wash with soap and water. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention if symptoms occur.
Eye Contact:	Flush with water for at least 15 minutes. Get medical attention.
5. FIRE FIGHTING MEASURES	
Flash Point (TCC):	50°F
Recommended Extinguishing Agents:	Dry chemical
Special Firefighting Procedures:	Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.
Hazardous Combustion Products:	Carbon monoxide, carbon dioxide, smoke, aldehydes, organic acids
Unusual Fire or Explosion Hazards:	Vapors may accumulate in low or confined areas, travel considerable distance to source of ignition, and flash back.
Flammable/Explosive Limits – lower %:	2.1%
Flammable/Explosive Limits – upper %:	12.5%
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:	Remove all ignition sources. Immediately contact emergency personnel. Keep unnecessary personnel away.
7. HANDLING AND STORAGE	
Handling:	Keep away from heat, spark and flame. Avoid contact with eyes, skin and clothing. Avoid breathing vapor and mist. Wash thoroughly after handling.
Storage:	Keep in a cool, well ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready for use. For safe storage, store at a temperature between 46°F to 82°F (8°C to 28°C).
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:	White
Odor:	Pungent, acrylic
Vapor Pressure:	29.25 mmHg @20°C (68° F)
Vapor Density:	3.5
Solubility in Water:	Slight
Specific Gravity:	1.04
Boiling Point:	101°C (214°F)
Volatile Organic Compound Content	1.82%; 18.4 grams/liter (A and B mixed)
Evaporation Rate (Ether = 1)	Not available
pH:	Does not apply

10. STABILITY AND REACTIVITY

Stability:	Stable
Hazardous Polymerization:	May occur with excessive aging, excessive heat, polymerization catalyst, inhibitor depletion, direct sunlight and under oxygen-free atmospheres.
Hazardous Decomposition Products:	None
Incompatibility:	Oxidizing agents. Strong alkalis. Strong acids and strong bases. Amines.

11. TOXICOLOGICAL INFORMATION

Ingredients:	Literature Referenced Target Organ and Other Health Effects						Carcinogen Status		
	ALG	IRR	KID	LIV	NER	RES	NTP	IARC	OSHA
Methyl Methacrylate	ALG	IRR	KID	LIV	NER	RES	NO	NO	NO
Synthetic Rubber	No data						NO	NO	NO
Methacrylic Acid	ALG	COR	IRR				NO	NO	NO
Polyglycol Dimethacrylate	ALG	IRR					NO	NO	NO
Tert-butyl perbenzoate	MUT						NO	NO	NO
Fumed Silica	NTO						NO	NO	NO

Abbreviations:

ALG	Allergen	LIV	Liver	CNS	Central Nervous System	NER	Nervous System
KID	Kidney	MUT	Mutagen	RES	Respiratory		
IRR	Irritant	COR	Corrosive	NTO	No Target Organs		

12. ECOLOGICAL INFORMATION

Ecological Information:	Not available
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13. DISPOSAL CONSIDERATIONS

Recommended methods of disposal: Dispose of according to Federal, State and Local regulations.
EPA Hazardous Waste Number: D001: Ignitable

14. TRANSPORTATION INFORMATION

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

Proper Shipping Name: Adhesives
Hazard Class or Division: 3
Identification Number: UN1133
Packing group: II
Exceptions: (Not more than 5L) Consumer Commodity ORM-D

International Air Transportation (ICAO/IATA):

Proper Shipping Name: Adhesives
Hazard Class or Division: 3
Identification Number: UN1133
Packing group: II
Exceptions: (Not more than 500 ml) May Qualify as Consumer Commodity ID8000

Water Transportation (IMO/IMDG):

Proper Shipping Name: Adhesives
Hazard Class or Division: 3
Identification Number: UN1133
Packing group: II
Marine pollutant: None Known

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): Methyl Methacrylate

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.

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EMERGENCY OVERVIEW

Physical state: Liquid
 Color: Off-White
 Odor: Pungent, Acrylic

HMIS:
 HEALTH: 2*
 FLAMMABILITY: 3
 PHYSICAL HAZARD: 1
 Personal Protection: See Section 8

WARNING: FLAMMABLE LIQUID AND VAPOR.
 MAY CAUSE ALLERGIC SKIN REACTION.
 MAY CAUSE EYE, AND SKIN AND RESPIRATORY TRACT IRRITATION.

Primary Routes of Entry: Skin, inhalation, eyes

Signs and Symptoms of Exposure:

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Eye Contact: Moderate eye irritation. Redness. Excess tearing.

Skin Contact: May cause allergic skin reaction. Itching. Moderate skin irritation. Redness.

Ingestion: Not expected to be harmful by ingestion.

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>
Methyl Methacrylate	60-100	100 ppm STEL 50 ppm TWA	100 ppm TWA 410 mg/m ³ TWA	50 ppm
Acrylonitrile/butadiene Resin	20-30	None	None	None
Aldehyde-amine condensation	1-5	None	None	None

4. FIRST AID MEASURES	
Ingestion:	Do not induce vomiting. Keep individual calm. Obtain medical attention.
Inhalation:	Remove to fresh air. If symptoms develop and persist, get medical attention.
Skin Contact:	Wash with soap and water. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention if symptoms occur.
Eye Contact:	Flush with water for at least 15 minutes. Get medical attention.
5. FIRE FIGHTING MEASURES	
Flash Point (TCC):	50°F
Recommended Extinguishing Agents:	Dry chemical
Special Firefighting Procedures:	Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.
Hazardous Combustion Products:	Carbon monoxide, carbon dioxide, smoke, aldehydes, organic acids
Unusual Fire or Explosion Hazards:	Vapors may accumulate in low or confined areas, travel considerable distance to source of ignition, and flash back.
Flammable/Explosive Limits – lower %:	2.1%
Flammable/Explosive Limits – upper %:	12.5%
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Specific Gravity:	0.97
Boiling Point:	101°C (214°F)
Volatile Organic Compound Content	1.82%; 18.4 grams/liter (A and B mixed)
Evaporation Rate (Ether = 1)	Not available
pH:	Does not apply

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Stability:	Stable
Hazardous Polymerization:	May occur with excessive aging, excessive heat, polymerization catalyst, inhibitor depletion, direct sunlight and under oxygen-free atmospheres.
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Methyl Methacrylate	ALG IRR KID LIV NER RES	NO	NO	NO
Acrylonitrile/butadiene Resin	NTO	NO	NO	NO
Aldehyde-amine condensation	No data	NO	NO	NO

Abbreviations:

ALG Allergen	LIV Liver	NTO No Target Organs	NER Nervous System
KID Kidney	RES Respiratory	IRR Irritant	

12. ECOLOGICAL INFORMATION

Ecological Information:	Not available
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13. DISPOSAL CONSIDERATIONS

Recommended methods of disposal:	Dispose of according to Federal, State and Local regulations.
EPA Hazardous Waste Number:	D001: Ignitable

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Proper Shipping Name: Adhesives
Hazard Class or Division: 3
Identification Number: UN1133
Packing group: II
Exceptions: (Not more than 5L) Consumer Commodity ORM-D

International Air Transportation (ICAO/IATA):

Proper Shipping Name: Adhesives
Hazard Class or Division: 3
Identification Number: UN1133
Packing group: II
Exceptions: (Not more than 500 ml) May Qualify as Consumer Commodity ID8000

Water Transportation (IMO/IMDG):

Proper Shipping Name: Adhesives
Hazard Class or Division: 3
Identification Number: UN1133
Packing group: II
Marine pollutant: None Known

15. REGULATORY INFORMATION

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