

Issue Date 27-May-2015

Revision Date 24-Nov-2015

Version 1

**1. IDENTIFICATION**

**Product identifier**

**Product Name** Fusionbond 370A

**Other means of identification**

**Product Code** MS-370A  
**UN/ID no.** UN1133  
**Synonyms** None

**Recommended use of the chemical and restrictions on use**

**Recommended Use** Adhesives.  
**Uses advised against** None known

**Details of the supplier of the safety data sheet**

**Manufacturer Address**  
Hernon Manufacturing Inc.  
121 Tech Drive  
Sanford, FL 32771  
800-527-0004

**Emergency telephone number**

**Company Phone Number** 407-322-4000  
**Emergency Telephone** Chemtel 800-255-3924

**2. HAZARDS IDENTIFICATION**

**Classification**

**OSHA Regulatory Status**

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 1 Sub-category A
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

**Label elements**

**Emergency Overview**

**Warning**

**Hazard statements**

Harmful if swallowed  
Causes severe skin burns and eye damage  
May cause an allergic skin reaction  
Causes serious eye damage  
Harmful if inhaled  
Harmful to aquatic life with long lasting effects  
May cause respiratory irritation  
May cause drowsiness or dizziness  
Highly flammable liquid and vapor

**Appearance** White**Physical state** liquid**Odor** Pungent**Precautionary Statements - Prevention**

Do not breathe dusts or mists  
 Wash face, hands and any exposed skin thoroughly after handling  
 Wear protective gloves/protective clothing/eye protection/face protection  
 Contaminated work clothing must not be allowed out of the workplace  
 Use only outdoors or in a well-ventilated area  
 Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
 Keep container tightly closed  
 Ground/bond container and receiving equipment  
 Use explosion-proof electrical/ ventilating / lighting/ equipment  
 Use only non-sparking tools  
 Take precautionary measures against static discharge  
 Keep cool

**Precautionary Statements - Response**

Immediately call a POISON CENTER or doctor  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 Immediately call a POISON CENTER or doctor  
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower  
 Wash contaminated clothing before reuse  
 If skin irritation or rash occurs: Get medical advice/attention  
 IF INHALED: Remove person to fresh air and keep comfortable for breathing  
 Immediately call a POISON CENTER or doctor  
 IF SWALLOWED: Rinse mouth. DO NOT induce vomiting  
 In case of fire: Use CO<sub>2</sub>, dry chemical, or foam to extinguish

**Precautionary Statements - Storage**

Store locked up  
 Store in a well-ventilated place. Keep container tightly closed

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

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.

**Other Information**

Not applicable

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance**

Chemical Name	CAS No.	Weight-%	Trade Secret
Methyl Methacrylate	80-62-6	30-60	*
Synthetic Rubber	Proprietary	20-30	*

Methacrylic Acid	79-41-4	10-15	*
Polyglycol Dimethacrylate	1189-08-8	1-3	*
T-Butyl Perbenzoate	614-45-9	1-3	*
Silicon Dioxide, Amorphous, Fumed, Crystalline Free	112945-52-5	1-3	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

#### 4. FIRST AID MEASURES

##### Description of first aid measures

<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
<b>Skin contact</b>	Avoid contact with skin and eyes. Immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. In the case of skin irritation or allergic reactions see a physician.
<b>Inhalation</b>	Remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. Get medical attention immediately.
<b>Ingestion</b>	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a POISON CENTER or doctor/physician if you feel unwell.

##### Most important symptoms and effects, both acute and delayed

**Symptoms** No information available.

##### Indication of any immediate medical attention and special treatment needed

**Note to physicians** Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

##### Suitable extinguishing media

Dry chemical.

**Unsuitable extinguishing media** No information available.

##### Specific hazards arising from the chemical

No information available.

**Hazardous combustion products** Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke). Aldehydes. Organic acids.

##### Explosion data

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

##### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### 6. ACCIDENTAL RELEASE MEASURES

##### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Use personal protective equipment as required. Ensure adequate ventilation, especially in confined areas.

**For emergency responders** Use personal protection recommended in Section 8.

### Environmental precautions

**Environmental precautions** Do not allow into any sewer, on the ground or into any body of water. See Section 12 for additional ecological information.

### Methods and material for containment and cleaning up

**Methods for containment** Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

**Methods for cleaning up** Remove all sources of ignition. Take up with sand or other non-combustible absorbent material and place into containers for later disposal.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on safe handling** Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists. Wash thoroughly after handling. Ensure adequate ventilation, especially in confined areas. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep at temperatures between 7 and 29 °C. Keep containers tightly closed in a cool, well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).

**Incompatible materials** Oxidizing agents. Strong alkalis. Strong acids. Strong bases. Amines.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

**Exposure Guidelines** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Methyl Methacrylate 80-62-6	STEL: 100 ppm TWA: 50 ppm	TWA: 100 ppm TWA: 410 mg/m <sup>3</sup> (vacated) TWA: 100 ppm (vacated) TWA: 410 mg/m <sup>3</sup>	IDLH: 1000 ppm TWA: 100 ppm TWA: 410 mg/m <sup>3</sup>
Methacrylic Acid 79-41-4	TWA: 20 ppm	(vacated) TWA: 20 ppm (vacated) TWA: 70 mg/m <sup>3</sup> (vacated) S*	TWA: 20 ppm TWA: 70 mg/m <sup>3</sup>

### Appropriate engineering controls

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Wear protective gloves and protective clothing. Use rubber or plastic gloves.

**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical state</b>	liquid	<b>Odor</b>	Pungent
<b>Appearance</b>	No information available	<b>Odor threshold</b>	No information available
<b>Color</b>	white		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Does not apply	
Melting point / freezing point	No information available	
Boiling point / boiling range	101 °C / 214 °F	
Flash point	10 °C / 50 °F	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	12.5% Methyl Methacrylate	
Lower flammability limit:	2.1% Methyl Methacrylate	
Vapor pressure	29.25 mmHg @20°C	
Vapor density	3.5	
Relative density	1.04	
Water solubility	slightly soluble	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

### Other Information

<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC Content (%)</b>	1.82%; 18.4 grams/liter (A and B mixed)
<b>Density</b>	No information available
<b>Bulk density</b>	No information available

## 10. STABILITY AND REACTIVITY

### Reactivity

No data available

### Chemical stability

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

Hazardous polymerization may occur.

### Conditions to avoid

Keep away from heat, sparks and open flame. Excessive heat. Extremes of temperature and direct sunlight.

### Incompatible materials

Oxidizing agents. Strong alkalis. Strong acids. Strong bases. Amines.

### Hazardous Decomposition Products

None.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

<b>Inhalation</b>	Inhalation of vapors in high concentration may cause irritation of respiratory system.
<b>Eye contact</b>	Irritating to eyes.
<b>Skin contact</b>	Irritating to skin. PROLONGED SKIN CONTACT MAY CAUSE IRRITATION.
<b>Ingestion</b>	No data available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Methyl Methacrylate 80-62-6	= 7900 mg/kg ( Rat ) = 7872 mg/kg ( Rat )	> 5 g/kg ( Rabbit )	= 4632 ppm ( Rat ) 4 h
Methacrylic Acid 79-41-4	= 1060 mg/kg ( Rat )	500 - 1000 mg/kg ( Rabbit ) = 500 mg/kg ( Rabbit )	= 7.1 mg/L ( Rat ) 4 h
T-Butyl Perbenzoate 614-45-9	= 1012 mg/kg ( Rat )	-	-
Silicon Dioxide, Amorphous, Fumed, Crystalline Free 112945-52-5	= 3160 mg/kg ( Rat )	-	-

### Information on toxicological effects

**Symptoms** No information available.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Sensitization** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** No information available.

Chemical Name	ACGIH	IARC	NTP	OSHA
Methyl Methacrylate 80-62-6	-	Group 3	-	-
Silicon Dioxide, Amorphous, Fumed, Crystalline Free 112945-52-5	-	Group 3	-	-

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Aspiration hazard** No information available.

### Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document.

<b>ATEmix (oral)</b>	5,744.00 mg/kg
<b>ATEmix (dermal)</b>	3,230.00 mg/kg
<b>ATEmix (inhalation-vapor)</b>	21.36 mg/l

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Harmful to aquatic life with long lasting effects

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Methyl Methacrylate 80-62-6	170: 96 h Pseudokirchneriella subcapitata mg/L EC50	125.5 - 190.7: 96 h Pimephales promelas mg/L LC50 static 153.9 - 341.8: 96 h Lepomis macrochirus mg/L LC50 static 79: 96 h Oncorhynchus mykiss mg/L LC50 static 79: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 243 - 275: 96 h Pimephales promelas mg/L LC50 flow-through 170 - 206: 96 h Lepomis macrochirus mg/L LC50 flow-through 326.4 - 426.9: 96 h Poecilia reticulata mg/L LC50 static	69: 48 h Daphnia magna mg/L EC50

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

Chemical Name	Partition coefficient
Methyl Methacrylate 80-62-6	0.7
Methacrylic Acid 79-41-4	0.93

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

**Disposal of wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging** Do not reuse container.

**US EPA Waste Number** D001

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Methyl Methacrylate 80-62-6	U162	Included in waste stream: F039	-	U162

Chemical Name	California Hazardous Waste Status
Methyl Methacrylate 80-62-6	Toxic Ignitable
T-Butyl Perbenzoate 614-45-9	Ignitable Reactive

**14. TRANSPORT INFORMATION**

**DOT**

**UN/ID no.** UN1133  
**Proper shipping name** Adhesives  
**Hazard Class** 3  
**Packing Group** II  
**Special Provisions** (Not more than 5L) Consumer Commodity ORM-D

**IATA**

UN/ID no.	UN1133
Proper shipping name	Adhesives
Hazard Class	3
Packing Group	II
Special Provisions	None

**IMDG**

UN/ID no.	UN1133
Proper shipping name	Adhesives
Hazard Class	3
Packing Group	II
Marine pollutant	None

**RID**

UN/ID no.	UN1133
Proper shipping name	Adhesives
Hazard Class	3
Packing Group	II
Special Provisions	(Not more than 5L) Consumer Commodity ORM-D

**ADR**

UN/ID no.	UN1133
Proper shipping name	Adhesives
Hazard Class	3
Packing Group	II

<b>15. REGULATORY INFORMATION</b>
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**International Inventories**

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

All ingredients are on the inventory or are exempt from listing.

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
Methyl Methacrylate - 80-62-6	1.0



**SARA 311/312 Hazard Categories**

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

**CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Methyl Methacrylate 80-62-6	1000 lb	-	-	X

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Methyl Methacrylate 80-62-6	1000 lb	-	RQ 1000 lb final RQ RQ 454 kg final RQ

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Methyl Methacrylate 80-62-6	X	X	X
Methacrylic Acid 79-41-4	X	X	X
T-Butyl Perbenzoate 614-45-9	X	X	X

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

<b>NFPA</b>	Health hazards 0	Flammability 0	Instability 0	Physical and Chemical Properties -
<b>HMIS</b>	Health hazards 2	Flammability 3	Physical hazards 2	Personal protection X

Prepared By SDS coordinator

Issue Date 27-May-2015

Revision Date 24-Nov-2015

**Revision Note**

No information available

**Disclaimer**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

Issue Date 03-Jun-2015

Revision Date 24-Nov-2015

Version 1

## 1. IDENTIFICATION

### Product identifier

**Product Name** Fusionbond 370B

### Other means of identification

**Product Code** MS-370B

**UN/ID no.** UN1133

**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended Use** Adhesives.

**Uses advised against** None known

### Details of the supplier of the safety data sheet

#### **Manufacturer Address**

Hernon Manufacturing Inc.  
121 Tech Drive  
Sanford, FL 32771  
800-527-0004

### Emergency telephone number

**Company Phone Number** 407-322-4000

**Emergency Telephone** Chemtel 800-255-3924

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Inhalation (Vapors)	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Skin sensitization	Category 1
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

### Label elements

#### Emergency Overview

#### **Warning**

#### **Hazard statements**

Harmful if inhaled  
Causes skin irritation  
Causes serious eye irritation  
May cause an allergic skin reaction  
May cause respiratory irritation  
May cause drowsiness or dizziness  
Harmful to aquatic life with long lasting effects  
Highly flammable liquid and vapor

**Appearance** No information available**Physical state** liquid**Odor** Pungent**Precautionary Statements - Prevention**

Avoid breathing dust/fume/gas/mist/vapors/spray  
 Use only outdoors or in a well-ventilated area  
 Wash face, hands and any exposed skin thoroughly after handling  
 Contaminated work clothing must not be allowed out of the workplace  
 Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
 Keep container tightly closed  
 Ground/bond container and receiving equipment  
 Use explosion-proof electrical/ ventilating / lighting/ equipment  
 Use only non-sparking tools  
 Take precautionary measures against static discharge  
 Wear protective gloves/eye protection/face protection  
 Keep cool

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 If eye irritation persists: Get medical advice/attention  
 If skin irritation or rash occurs: Get medical advice/attention  
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower  
 Wash contaminated clothing before reuse  
 IF INHALED: Remove person to fresh air and keep comfortable for breathing  
 Call a POISON CENTER or doctor if you feel unwell  
 In case of fire: Use CO<sub>2</sub>, dry chemical, or foam to extinguish

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed  
 Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

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.

**Other Information**

Not applicable

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance**

Chemical Name	CAS No.	Weight-%	Trade Secret
Methyl Methacrylate	80-62-6	60-100	*
Acrylonitrile/butadiene Resin	9010-94-0	10-20	*
Synthetic Rubber	Proprietary	5-10	*
Aldehyde-amine condensate	34562-31-7	1-5	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

#### 4. FIRST AID MEASURES

##### Description of first aid measures

<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
<b>Skin contact</b>	Wash with soap and water. Flush skin with water for several minutes. Remove contaminated clothing and shoes. If irritation develops, seek medical attention. Wash clothing before reuse.
<b>Inhalation</b>	Remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. Get medical attention immediately.
<b>Ingestion</b>	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a POISON CENTER or doctor/physician if you feel unwell.

##### Most important symptoms and effects, both acute and delayed

**Symptoms** No information available.

##### Indication of any immediate medical attention and special treatment needed

**Note to physicians** Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

##### Suitable extinguishing media

Dry chemical.

**Unsuitable extinguishing media** No information available.

##### Specific hazards arising from the chemical

Vapors may travel to source of ignition and flash back.

**Hazardous combustion products** Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke). Aldehydes. Organic acids.

##### Explosion data

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

##### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### 6. ACCIDENTAL RELEASE MEASURES

##### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Use personal protective equipment as required. Ensure adequate ventilation, especially in confined areas.

**For emergency responders** Use personal protection recommended in Section 8.

##### Environmental precautions

**Environmental precautions** Do not allow into any sewer, on the ground or into any body of water. See Section 12 for

additional ecological information.

### Methods and material for containment and cleaning up

<b>Methods for containment</b>	Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.
<b>Methods for cleaning up</b>	Eliminate sources of ignition. Prevent additional discharge of material, if possible to do so without hazard. Immediately contact emergency personnel. Keep unnecessary personnel away. Avoid contact with material.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

<b>Advice on safe handling</b>	Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists. Wash thoroughly after handling. Ensure adequate ventilation, especially in confined areas. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).
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### Conditions for safe storage, including any incompatibilities

<b>Storage Conditions</b>	Keep at temperatures between 7 and 29 °C. Keep containers tightly closed in a cool, well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).
<b>Incompatible materials</b>	Oxidizing substances. Strong acids. Strong bases. Alkali. Amines.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

**Exposure Guidelines** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Methyl Methacrylate 80-62-6	STEL: 100 ppm TWA: 50 ppm	TWA: 100 ppm TWA: 410 mg/m <sup>3</sup> (vacated) TWA: 100 ppm (vacated) TWA: 410 mg/m <sup>3</sup>	IDLH: 1000 ppm TWA: 100 ppm TWA: 410 mg/m <sup>3</sup>

### Appropriate engineering controls

<b>Engineering Controls</b>	Showers Eyewash stations Ventilation systems.
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### Individual protection measures, such as personal protective equipment

<b>Eye/face protection</b>	Wear safety glasses with side shields (or goggles).
<b>Skin and body protection</b>	Suitable protective clothing. Use rubber or plastic gloves.
<b>Respiratory protection</b>	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
<b>General Hygiene Considerations</b>	Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical state</b>	liquid	<b>Odor</b>	Pungent
<b>Appearance</b>	No information available	<b>Odor threshold</b>	No information available
<b>Color</b>	Blue		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	Does not apply	
<b>Melting point / freezing point</b>	No information available	
<b>Boiling point / boiling range</b>	101 °C / 214 °F	
<b>Flash point</b>	10 °C / 50 °F	
<b>Evaporation rate</b>	No information available	
<b>Flammability (solid, gas)</b>	No information available	
<b>Flammability Limit in Air</b>		
<b>Upper flammability limit:</b>	12.5%	
<b>Lower flammability limit:</b>	2.1%	
<b>Vapor pressure</b>	29.25 mmHg @20°C	
<b>Vapor density</b>	3.5	
<b>Relative density</b>	0.97	
<b>Water solubility</b>	slightly soluble	
<b>Solubility in other solvents</b>	No information available	
<b>Partition coefficient</b>	No information available	
<b>Autoignition temperature</b>	No information available	
<b>Decomposition temperature</b>	No information available	
<b>Kinematic viscosity</b>	No information available	
<b>Dynamic viscosity</b>	No information available	
<b>Explosive properties</b>	No information available	
<b>Oxidizing properties</b>	No information available	

### Other Information

<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC Content (%)</b>	1.82%; 18.4 grams/liter (A and B mixed)
<b>Density</b>	No information available
<b>Bulk density</b>	No information available

## 10. STABILITY AND REACTIVITY

### Reactivity

No data available

### Chemical stability

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

Excessive heat.

**Hazardous polymerization**      Hazardous polymerization may occur.

### Conditions to avoid

Extremes of temperature and direct sunlight.

### Incompatible materials

Oxidizing substances. Strong acids. Strong bases. Alkali. Amines.

### Hazardous Decomposition Products

None.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

<b>Inhalation</b>	May cause irritation of respiratory tract.
<b>Eye contact</b>	Moderately irritating to the eyes.
<b>Skin contact</b>	Substance may cause slight skin irritation.
<b>Ingestion</b>	May be harmful if swallowed.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Methyl Methacrylate 80-62-6	= 7900 mg/kg ( Rat ) = 7872 mg/kg ( Rat )	> 5 g/kg ( Rabbit )	= 4632 ppm ( Rat ) 4 h

### Information on toxicological effects

**Symptoms** No information available.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Sensitization** No information available.  
**Germ cell mutagenicity** No information available.  
**Carcinogenicity** No information available.

Chemical Name	ACGIH	IARC	NTP	OSHA
Methyl Methacrylate 80-62-6	-	Group 3	-	-

**Reproductive toxicity** No information available.  
**STOT - single exposure** No information available.  
**STOT - repeated exposure** No information available.  
**Aspiration hazard** No information available.

### Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document.

<b>ATEmix (dermal)</b>	4,941.00 mg/kg
<b>ATEmix (inhalation-vapor)</b>	18.72 mg/l

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Harmful to aquatic life with long lasting effects

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Methyl Methacrylate 80-62-6	170: 96 h Pseudokirchneriella subcapitata mg/L EC50	125.5 - 190.7: 96 h Pimephales promelas mg/L LC50 static 153.9 - 341.8: 96 h Lepomis macrochirus mg/L LC50 static 79: 96 h Oncorhynchus mykiss mg/L LC50 static 79: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 243 - 275: 96 h Pimephales promelas mg/L LC50 flow-through 170 - 206: 96 h Lepomis macrochirus mg/L LC50 flow-through 326.4 - 426.9: 96 h Poecilia reticulata mg/L LC50 static	69: 48 h Daphnia magna mg/L EC50

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

Chemical Name	Partition coefficient
Methyl Methacrylate 80-62-6	0.7

**Other adverse effects**

No information available

### 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods****Disposal of wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging**

Do not reuse container.

**US EPA Waste Number**

D001

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Methyl Methacrylate 80-62-6	U162	Included in waste stream: F039	-	U162

Chemical Name	California Hazardous Waste Status
Methyl Methacrylate 80-62-6	Toxic Ignitable

### 14. TRANSPORT INFORMATION

**DOT**

**UN/ID no.** UN1133  
**Proper shipping name** Adhesives  
**Hazard Class** 3  
**Packing Group** II  
**Special Provisions** (Not more than 5L) Consumer Commodity ORM-D

**IATA**

**UN/ID no.** UN1133  
**Proper shipping name** Adhesives  
**Hazard Class** 3  
**Packing Group** II

**IMDG**

**UN/ID no.** UN1133  
**Proper shipping name** Adhesives  
**Hazard Class** 3  
**Packing Group** II  
**Marine pollutant** None

**RID**

**UN/ID no.** UN1133  
**Proper shipping name** Adhesives



**Hazard Class** 3  
**Packing Group** II  
**Special Provisions** (Not more than 5L) Consumer Commodity ORM-D

**ADR**

**UN/ID no.** UN1133  
**Proper shipping name** Adhesives  
**Hazard Class** 3  
**Packing Group** II

<b>15. REGULATORY INFORMATION</b>
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**International Inventories**

<b>TSCA</b>	Complies
<b>DSL/NDSL</b>	Complies
<b>EINECS/ELINCS</b>	Complies
<b>ENCS</b>	Complies
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<b>AICS</b>	Complies

All ingredients are on the inventory or are exempt from listing.

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
METHYL METHACRYLATE - 80-62-6	1.0

**SARA 311/312 Hazard Categories**

<b>Acute health hazard</b>	No
<b>Chronic Health Hazard</b>	No
<b>Fire hazard</b>	No
<b>Sudden release of pressure hazard</b>	No
<b>Reactive Hazard</b>	No

**CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
METHYL METHACRYLATE 80-62-6	1000 lb	-	-	X

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
METHYL METHACRYLATE 80-62-6	1000 lb	-	RQ 1000 lb final RQ RQ 454 kg final RQ

**US State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
METHYL METHACRYLATE 80-62-6	X	X	X

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

<b><u>NFPA</u></b>	Health hazards 0	Flammability 0	Instability 0	Physical and Chemical Properties -
<b><u>HMIS</u></b>	Health hazards 2	Flammability 3	Physical hazards 1	Personal protection X

Prepared By SDS coordinator  
 Issue Date 03-Jun-2015  
 Revision Date 24-Nov-2015  
 Revision Note

No information available

**Disclaimer**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**