

Issue Date 25-Sep-2015

Revision Date 25-Sep-2017

Version 1

**1. IDENTIFICATION****Product identifier****Product Name** Fusionbond 375A**Other means of identification****Product Code** MS-375A**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 considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 3
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
Specific target organ toxicity (repeated exposure)	Category 2
Flammable liquids	Category 2

**Label elements****Emergency Overview****Danger****Hazard statements**

Harmful if swallowed

Harmful in contact with skin

Toxic if inhaled

Causes severe skin burns and eye damage

May cause an allergic skin reaction

May cause respiratory irritation  
 May cause damage to organs through prolonged or repeated exposure  
 Highly flammable liquid and vapor



**Appearance** No information available

**Physical state** Liquid

**Odor** Pungent

#### Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product  
 Wear protective gloves/protective clothing/eye protection/face protection  
 Use only outdoors or in a well-ventilated area  
 Do not breathe dust/fume/gas/mist/vapors/spray  
 Contaminated work clothing should 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 only non-sparking tools  
 Take precautionary measures against static discharge  
 Use explosion-proof electrical/ ventilating / lighting/ equipment  
 Keep cool

#### Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician  
 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/physician  
 Call a POISON CENTER or doctor/physician if you feel unwell  
 Wash contaminated clothing before reuse  
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
 If skin irritation or rash occurs: Get medical advice/attention  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 Immediately call a POISON CENTER or doctor/physician  
 Call a POISON CENTER or doctor/physician if you feel unwell  
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
 Rinse mouth  
 Do NOT induce vomiting  
 In case of fire: Use CO2, dry chemical, or foam for extinction

#### 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)

Not applicable

#### Other Information

Harmful to aquatic life with long lasting effects  
 Harmful to aquatic life

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Substance

Chemical Name	CAS No.	Weight-%	Trade Secret
METHYL METHACRYLATE	80-62-6	30 - 60	*
METHACRYLIC ACID	79-41-4	5 - 10	*
POLYETHYLENE GLYCOL DIMETHACRYLATE	25852-47-5	5 - 10	*
BUTYL HYDROXY TOLUENE	128-37-0	1 - 5	*
Cumene Hydroperoxide	80-15-9	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>	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

Vapors may accumulate in confined areas (basement, tanks, hopper/tank cars, etc.). Vapors may travel to source of ignition and flash back.

**Hazardous combustion products** Carbon monoxide. Carbon dioxide (CO<sub>2</sub>). Hydrocarbons. 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** 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

**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.

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

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure Guidelines

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>
BUTYL HYDROXY TOLUENE 128-37-0	TWA: 2 mg/m <sup>3</sup> inhalable fraction and vapor	(vacated) TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>

### Appropriate engineering controls

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

**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>	Wear protective gloves and 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>	Amber		

<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>	8 °C / 46 °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% Methyl Methacrylate	
<b>Lower flammability limit:</b>	2.1% Methyl Methacrylate	
<b>Vapor pressure</b>	29.25 mmHg @20°C	
<b>Vapor density</b>	3.5	
<b>Relative density</b>	1.05	
<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>	No information available
<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.

**Hazardous polymerization** 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**

**Inhalation** No data available.

**Eye contact** No data available.

**Skin contact** No data available.

**Ingestion** No data available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
METHYL METHACRYLATE 80-62-6	= 7872 mg/kg ( Rat ) 8420 - 10000 mg/kg ( Rat )	5000 - 7500 mg/kg ( Rabbit ) > 5 g/kg ( Rabbit )	= 7093 ppm ( Rat ) 4 h
METHACRYLIC ACID 79-41-4	= 1060 mg/kg ( Rat )	= 500 mg/kg ( Rabbit ) 500 - 1000 mg/kg ( Rabbit )	= 7.1 mg/L ( Rat ) 4 h
BUTYL HYDROXY TOLUENE 128-37-0	> 2930 mg/kg ( Rat )	> 2000 mg/kg ( Rat )	-
Cumene Hydroperoxide 80-15-9	= 382 mg/kg ( Rat )	= 0.126 mL/kg ( Rabbit )	= 220 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**

Chemical Name	ACGIH	IARC	NTP	OSHA
METHYL METHACRYLATE 80-62-6	-	Group 3	-	-
BUTYL HYDROXY TOLUENE 128-37-0	-	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.

ATEmix (oral)	1,125.00 mg/kg
ATEmix (dermal)	1,189.00 mg/kg
ATEmix (inhalation-dust/mist)	0.65 mg/l
ATEmix (inhalation-vapor)	29.23 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	243 - 275: 96 h Pimephales promelas mg/L LC50 flow-through 125.5 - 190.7: 96 h Pimephales promelas mg/L LC50 static 79: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 153.9 - 341.8: 96 h Lepomis macrochirus mg/L LC50 static 170 - 206: 96 h Lepomis macrochirus mg/L LC50 flow-through 326.4 - 426.9: 96 h Poecilia reticulata mg/L LC50 static 79: 96 h Oncorhynchus mykiss mg/L LC50 static	69: 48 h Daphnia magna mg/L EC50
BUTYL HYDROXY TOLUENE 128-37-0	6: 72 h Pseudokirchneriella subcapitata mg/L EC50 0.42: 72 h Desmodesmus subspicatus mg/L EC50	5: 48 h Oryzias latipes mg/L LC50	-
Cumene Hydroperoxide 80-15-9	-	3.9: 96 h Oncorhynchus mykiss mg/L LC50 static	7: 24 h Daphnia magna mg/L EC50
Insoluble Saccharin 81-07-2	-	18300: 96 h Pimephales promelas mg/L LC50	-
DEQUEST 2010 2809-21-4	-	868: 96 h Lepomis macrochirus mg/L LC50 static 360: 96 h Oncorhynchus mykiss mg/L LC50 static	527: 48 h Daphnia magna mg/L EC50

**Persistence and degradability**

No information available.

**Bioaccumulation**

Chemical Name	Partition coefficient
METHYL METHACRYLATE 80-62-6	0.7
METHACRYLIC ACID 79-41-4	0.93
BUTYL HYDROXY TOLUENE 128-37-0	4.17

**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.

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
Cumene Hydroperoxide 80-15-9	-	-	-	U096

Chemical Name	California Hazardous Waste Status
METHYL METHACRYLATE 80-62-6	Toxic Ignitable
Cumene Hydroperoxide 80-15-9	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  
**Marine pollutant** None known.

##### 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  
**Special Provisions** None  
**Marine pollutant** None known

#### 15. REGULATORY INFORMATION

##### 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
Cumene Hydroperoxide - 80-15-9	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	Yes

#### 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
Cumene Hydroperoxide 80-15-9	10 lb	-	RQ 10 lb final RQ RQ 4.54 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
BUTYL HYDROXY TOLUENE 128-37-0	X	X	X
Cumene Hydroperoxide 80-15-9	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**

<u>NFPA</u>	Health hazards -	Flammability -	Instability -	Physical and Chemical Properties -
<u>HMIS</u>	Health hazards -	Flammability -	Physical hazards -	Personal protection -
Prepared By	SDS coordinator			
Issue Date	25-Sep-2015			
Revision Date	25-Sep-2017			
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 25-Sep-2017

Version 1

**1. IDENTIFICATION****Product identifier****Product Name** Fusionbond 375B**Other means of identification****Product Code** MS-375B**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 considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	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****Danger****Hazard statements**Harmful if swallowed  
Harmful in contact with skin  
Causes skin irritation  
Causes serious eye irritation  
May cause an allergic skin reaction  
May cause respiratory irritation  
Highly flammable liquid and vapor

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

Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Wear protective gloves/protective clothing/eye protection/face protection  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Contaminated work clothing should 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 only non-sparking tools  
Take precautionary measures against static discharge  
Use explosion-proof electrical/ ventilating / lighting/ equipment  
Keep cool

**Precautionary Statements - Response**

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  
Call a POISON CENTER or doctor/physician if you feel unwell  
If skin irritation or rash occurs: Get medical advice/attention  
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
Wash contaminated clothing before reuse  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
Call a POISON CENTER or doctor/physician if you feel unwell  
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
Rinse mouth  
In case of fire: Use CO2, dry chemical, or foam for extinction

**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)**

Not applicable

**Other Information**

Harmful to aquatic life with long lasting effects  
Harmful to aquatic life

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Substance

Chemical Name	CAS No.	Weight-%	Trade Secret
METHYL METHACRYLATE	80-62-6	60 - 100	*
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

Flammable.

**Hazardous combustion products** Carbon monoxide. Carbon dioxide (CO<sub>2</sub>). Hydrocarbons. 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.

### 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** 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

**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.

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

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
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### 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>	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% Methyl Methacrylate	
<b>Lower flammability limit:</b>	2.1% Methyl Methacrylate	
<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>	No information available
<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.

<b>Hazardous polymerization</b>	Hazardous polymerization may occur.
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### Conditions to avoid

Keep away from heat, sparks and open flame.

### Incompatible materials

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

### Hazardous Decomposition Products

None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

Inhalation	No data available.
Eye contact	No data available
Skin contact	No data available.
Ingestion	No data available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
METHYL METHACRYLATE 80-62-6	= 7872 mg/kg ( Rat ) 8420 - 10000 mg/kg ( Rat )	5000 - 7500 mg/kg ( Rabbit ) > 5 g/kg ( Rabbit )	= 7093 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

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.

ATEmix (oral)	548.00 mg/kg
ATEmix (dermal)	1,205.00 mg/kg
ATEmix (inhalation-vapor)	29.21 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	243 - 275: 96 h Pimephales promelas mg/L LC50 flow-through 125.5 - 190.7: 96 h Pimephales promelas mg/L LC50 static 79: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 153.9 - 341.8: 96 h Lepomis macrochirus mg/L LC50 static 170 - 206: 96 h Lepomis	69: 48 h Daphnia magna mg/L EC50



		macrochirus mg/L LC50 flow-through 326.4 - 426.9: 96 h Poecilia reticulata mg/L LC50 static 79: 96 h Oncorhynchus mykiss mg/L LC50 static	
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**Persistence and degradability**

No information available.

**Bioaccumulation**

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.

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  
**Marine pollutant** None known

**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 known

## 15. REGULATORY INFORMATION

### 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	No
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

#### CWA (Clean Water Act)

This product does not contain any substances regulated as 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**

**NFPA**                      Health hazards -      Flammability -                      Instability -                      Physical and Chemical Properties -  
**HMIS**                      Health hazards -      Flammability -                      Physical hazards -                      Personal protection -

Prepared By                      SDS coordinator  
Issue Date                              03-Jun-2015  
Revision Date                          25-Sep-2017  
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**