

SAFETY DATA SHEET

Issue Date 25-Sep-2015 Revision Date 11-Dec-2015 Version 1

1. IDENTIFICATION

Product identifier

Product Name Fusionbond 372A

Other means of identification

Product Code MS-372A 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

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Vapors)	Category 4
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

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 CO2, 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)

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

Moderate eye irritation. Redness. Excess tearing.

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

Other Information

Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Substance</u>

Chemical Name	CAS No.	Weight-%	Trade Secret
METHYL METHACRYLATE	80-62-6	30-60	*
SYNTHETIC RUBBER	9003-55-8	30-40	*
METHACRYLIC ACID	79-41-4	10-15	*

POLYETHYLENE GLYCOL DIMETHACRYLATE	25852-47-5	1-3	*
T-BUTYL PERBENZOATE	614-45-9	1-3	*

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

4. FIRST AID MEASURES

Description of first aid measures

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

Skin contact 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.

Inhalation Remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give

artificial respiration. Get medical attention immediately.

Ingestion 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

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 (CO2). 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 precautionsDo 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 containmentAbsorb 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 GuidelinesThis product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

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/m³ (vacated) TWA: 100 ppm (vacated) TWA: 410 mg/m³	IDLH: 1000 ppm TWA: 100 ppm TWA: 410 mg/m³
METHACRYLIC ACID 79-41-4	TWA: 20 ppm	(vacated) TWA: 20 ppm (vacated) TWA: 70 mg/m³ (vacated) S*	TWA: 20 ppm TWA: 70 mg/m³

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.

Remarks • Method

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Liquid

Appearance No information available Odor Pungent

No information available

Color White Odor threshold No information available

<u>Property</u> <u>Values</u>

pH Does not apply

Melting point / freezing pointNo information availableBoiling point / boiling range101 °C / 214 °FFlash point10 °C / 50 °FEvaporation rateNo information available

Flammability (solid, gas) Flammability Limit in Air

Upper flammability limit:12.5% Methyl MethacylateLower flammability limit:2.1% Methyl MethacylateVapor pressure29.25 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 No information available **Autoignition temperature 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

Softening pointNo information availableMolecular weightNo information available

VOC Content (%) 1.82%; 18.4 g/L

DensityNo information availableBulk densityNo 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 No data available

Inhalation Inhalation of vapors in high concentration may cause irritation of respiratory system.

Eye contact Irritating to eyes.

Skin contact May be harmful is absorbed through skin. Prolonged contact may cause redness and

irritation.

Ingestion No data available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
METHYL METHACRYLATE	= 7900 mg/kg (Rat) = 7872 mg/kg	> 5 g/kg (Rabbit)	= 4632 ppm (Rat) 4 h
80-62-6	(Rat)		
METHACRYLIC ACID	= 1060 mg/kg (Rat)	500 - 1000 mg/kg (Rabbit) = 500	= 7.1 mg/L (Rat) 4 h
79-41-4		mg/kg (Rabbit)	
T-BUTYL PERBENZOATE	= 1012 mg/kg (Rat)	-	-
614-45-9			

Information on toxicological effects

Symptoms No information available.

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

SensitizationNo information available.Germ cell mutagenicityNo information available.CarcinogenicityNo information available.

Chemical Name	ACGIH	IARC	NTP	OSHA
METHYL METHACRYLATE	-	Group 3	-	-
80-62-6				
Styrene-Butadiene-Styrene	-	Group 3	-	-
Polymer		•		
9003-55-8				

Reproductive toxicity
STOT - single exposure
STOT - repeated exposure
Aspiration hazard

No information available.
No information available.
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)
 3,157.00 mg/kg

 ATEmix (dermal)
 2,443.00 mg/kg

 ATEmix (inhalation-vapor)
 28.49 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	69: 48 h Daphnia magna mg/L EC50
		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

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Chemical Name	Partition coefficient
METHYL METHACRYLATE	0.7
80-62-6	
METHACRYLIC ACID	0.93
79-41-4	

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastesDisposal 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	U162	Included in waste stream:	=	U162
80-62-6		F039		

Chemical Name	California Hazardous Waste Status
METHYL METHACRYLATE	Toxic
80-62-6	Ignitable
T-BUTYL PERBENZOATE	Ignitable
614-45-9	Reactive

14. TRANSPORT INFORMATION

<u>DOT</u>

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 ||

IMDG

UN/ID no. UN1133
Proper shipping name Adhesives

Hazard Class 3
Packing Group ||

RID

UN/ID no. UN1133
Proper shipping name Adhesives

Hazard Class 3
Packing Group ||

Special Provisions (Not more than 5L) Consumer Commodity ORM-D

ADR

UN/ID no. UN1133
Proper shipping name Adhesives

Hazard Class 3
Packing Group ||

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	Yes
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	-	-	Х

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	1000 lb	-	RQ 1000 lb final RQ
80-62-6			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	X	X	X
80-62-6			
METHACRYLIC ACID	X	X	X
79-41-4			
T-BUTYL PERBENZOATE	X	X	X
614-45-9			

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 0 Flammability 0 Instability 0 Physical and Chemical

Properties -

HMIS Health hazards 2* Flammability 3 Physical hazards 2 Personal protection X

Prepared BySDS coordinatorIssue Date25-Sep-2015Revision Date11-Dec-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



SAFETY DATA SHEET

Issue Date 03-Jun-2015 Revision Date 11-Dec-2015 Version 1

1. IDENTIFICATION

Product identifier

Product Name Fusionbond 372B

Other means of identification

Product Code MS-372B 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

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 Blue acrylic 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

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

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 CO2, 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)

Moderate respiratory tract irritation. Shortness of breath. Coughing.

Moderate eye irritation. Redness. Excess tearing.

May cause allergic skin reaction. Itching. Moderate skin irritation. Redness.

Other Information

Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Chemical Name	CAS No.	Weight-%	Trade Secret
METHYL METHACRYLATE	80-62-6	60-80	*
Synthetic Rubber	9003-55-8	30-40	*
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

Eye contactRinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

Skin contact 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.

Inhalation Remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give

artificial respiration. Get medical attention immediately.

Ingestion 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 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 containmentAbsorb 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 8 and 30 °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 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	STEL: 100 ppm	TWA: 100 ppm	IDLH: 1000 ppm
80-62-6	TWA: 50 ppm	TWA: 410 mg/m ³	TWA: 100 ppm
		(vacated) TWA: 100 ppm	TWA: 410 mg/m ³
		(vacated) TWA: 410 mg/m ³	-

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 protectionWear 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

Physical state Liquid

Appearance No information available Odor Pungent

Color Blue Odor threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH Does not apply

Melting point / freezing pointNo information availableBoiling point / boiling range101 °C / 214 °FFlash point10 °C / 50 °FEvaporation rateNo information availableFlammability (solid, gas)No information available

Flammability Limit in Air

Upper flammability limit: 12.5% Lower flammability limit: 2.1%

Vapor pressure 29.25 mmHg @20°C

Vapor density 3.5 Relative density 0.97

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

Softening point

No information available

No information available

VOC Content (%) 1.82%; 18.4 g/L

DensityNo information availableBulk densityNo 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

Inhalation May cause irritation of respiratory tract.

Eye contact Moderately irritating to the eyes.

Skin contact Substance may cause slight skin irritation.

Ingestion No data available.

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

Information on toxicological effects

Symptoms No information available.

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

SensitizationNo information available.Germ cell mutagenicityNo information available.CarcinogenicityNo information available.

Chemical Name	ACGIH	IARC	NTP	OSHA
METHYL METHACRYLATE	-	Group 3	-	-
80-62-6				
Synthetic Rubber	-	Group 3	-	-
9003-55-8		•		

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

Numerical measures of toxicity - Product Information

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

ATEmix (dermal) 4,941.00 mg/kg ATEmix (inhalation-vapor) 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	170: 96 h Pseudokirchneriella	125.5 - 190.7: 96 h Pimephales	69: 48 h Daphnia magna mg/L
80-62-6	subcapitata mg/L EC50	promelas mg/L LC50 static 153.9 -	EC50
	-	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	

Persistence and degradability

No information available.

Bioaccumulation

Chemical Name	Partition coefficient
METHYL METHACRYLATE	0.7
80-62-6	

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	U162	Included in waste stream:	=	U162
80-62-6		F039		

Chemical Name	California Hazardous Waste Status
METHYL METHACRYLATE	Toxic
80-62-6	Ignitable

14. TRANSPORT INFORMATION

<u>DOT</u>

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

<u>IMDG</u>

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

15. REGULATORY INFORMATION

International Inventories

TSCA Complies DSL/NDSL Complies **EINECS/ELINCS** Complies **ENCS** Complies **IECSC** Complies Complies **KECL 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

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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	1000 lb	-	-	Χ
80-62-6				

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	1000 lb	-	RQ 1000 lb final RQ
80-62-6			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	X	X	X
80-62-6			

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 0 Flammability 0 Instability 0 Physical and Chemical Properties -

HMIS Health hazards 2* Flammability 3 Physical hazards 1 Personal protection X

Prepared By SDS coordinator Issue Date 03-Jun-2015 Revision Date 11-Dec-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