SAFETY DATA SHEET

1. Identification

Product identifier	PLEXUS® MA300/MA310 Activator	
Other means of identification		
SKU#	0905	
Recommended use	Not available.	
Recommended restrictions	None known.	
Manufacturer/Importer/Supplier	r/Distributor information	
Manufacturer		
Company name Address	ITW Performance Polymers 30 Endicott Street Danvers, MA 01923 United States	
Telephone	Customer Service 978-777-1100	
Website	www.itwperformancepolymers.com	
E-mail	Not available.	
Contact person	EHS Department	
Emergency phone number	Chemtrec 800-424-9300 International 703-527-3887	
2. Hazard(s) identification	1	
Physical hazards	Flammable liquids	Category 2
Health hazards	Acute toxicity, inhalation	Category 4
	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2A
	Sensitization, skin	Category 1A
	Specific target organ toxicity, single exposu	
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	
Label elements		
Signal word	Danger	
Hazard statement	Highly flammable liquid and vapor. Causes Causes serious eye irritation. Harmful if inha	skin irritation. May cause an allergic skin reaction. aled. May cause respiratory irritation.
Precautionary statement		
Prevention	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. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/eye protection/face protection.	
Response	If inhaled: Remove person to fresh air and k cautiously with water for several minutes. R Continue rinsing. Call a poison center/docto medical advice/attention. If eye irritation per	contaminated clothing. Rinse skin with water/shower. teep comfortable for breathing. If in eyes: Rinse emove contact lenses, if present and easy to do. or if you feel unwell. If skin irritation or rash occurs: Get sists: Get medical advice/attention. Take off ouse. In case of fire: Use appropriate media to
Storage	Keep cool. Store in a well-ventilated place.	Keep container tightly closed. Store locked up.

Hazard(s) not otherwise classified (HNOC) Supplemental information

Dispose of contents/container in accordance with local/regional/national/international regulations.

Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion. None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Methyl Methacrylate		80-62-6	60 - 80
PYRIDINE, 3,5-DIETHYL-1,2-DIHYDR(NYL-2-P ROPYL-	O-1-PHE	34562-31-7	2.5 - 10
Other components below re	eportable levels		20 - 40

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures	
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a poison center or doctor/physician if you feel unwell.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General information	Take off all contaminated clothing immediately. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Carbon dioxide (CO2). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly grounded containers. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water. During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	Highly flammable liquid and vapor.

6. Accidental release measures

6. Accidental release measures	
Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist/vapors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Use appropriate containment to avoid environmental contamination. Transfer by mechanical means such as vacuum truck to a salvage tank or other suitable container for recovery or safe disposal. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools.
	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.
	Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.
7. Handling and storage	
Precautions for safe handling	Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. Explosion-proof general and local exhausi ventilation. Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Avoid breathing mist/vapors. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
	For additional information on equipment bonding and grounding, refer to the Canadian Electrical Code in Canada, (CSA C22.1), or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents" or National Fire Protection Association (NFPA) 77, "Recommended Practice on Static Electricity" or National Fire Protection Association (NFPA) 70, "National Electrical Code".
Conditions for safe storage, including any incompatibilities	Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Eliminate sources of ignition. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

Components	Туре	Value	
Methyl Methacrylate (CAS 80-62-6)	PEL	410 mg/m3	
		100 ppm	

US. ACGIH Threshold Limi Components	Туре	Value
Methyl Methacrylate (CAS 80-62-6)	STEL	100 ppm
,	TWA	50 ppm
US. NIOSH: Pocket Guide t	o Chemical Hazards	
Components	Туре	Value
Methyl Methacrylate (CAS 80-62-6)	TWA	410 mg/m3
		100 ppm
Biological limit values	No biological exposure limits noted	for the ingredient(s).
Appropriate engineering controls	Ventilation rates should be matche exhaust ventilation, or other engine	exhaust ventilation. Good general ventilation should be used. In to conditions. If applicable, use process enclosures, local evering controls to maintain airborne levels below recommended have not been established, maintain airborne levels to an station and safety shower.
ndividual protection measures Eye/face protection	s, such as personal protective equip Chemical respirator with organic va	
Skin protection Hand protection	Wear appropriate chemical resista	nt gloves.
Other	Wear appropriate chemical resista	nt clothing.
Respiratory protection	Chemical respirator with organic va	apor cartridge and full facepiece.
Thermal hazards	Wear appropriate thermal protective	e clothing, when necessary.
General hygiene considerations	after handling the material and bef	observe good personal hygiene measures, such as washing ore eating, drinking, and/or smoking. Routinely wash work to remove contaminants. Contaminated work clothing should no
9. Physical and chemical	properties	
Appearance	Paste	

	· · ·
Appearance	Paste.
Physical state	Liquid.
Form	Paste.
Color	Not available.
Odor	Fragrant
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	-54.4 °F (-48 °C) estimated
Initial boiling point and boiling range	212.9 °F (100.5 °C) estimated
Flash point	50.0 °F (10.0 °C) estimated
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or exp	losive limits
Flammability limit - lower (%)	2.1 % estimated
Flammability limit - upper (%)	12.5 % estimated
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	28 mm Hg @ 68 F
Vapor density	Not available.
Relative density	Not available.

Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	0.96 g/cm3 estimated
Explosive properties	Not explosive.
Flammability class	Flammable IB estimated
Oxidizing properties	Not oxidizing.
pH in aqueous solution	4.5 - 5.5 @ 5% solution
Specific gravity	0.96 estimated

10. Stat	oility and	I reactivity	

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents. Nitrates. Peroxides.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Harmful if inhaled.
Skin contact	Causes skin irritation. May cause an allergic skin reaction.
Eye contact	Causes serious eye irritation.
Ingestion	Expected to be a low ingestion hazard.
Symptoms related to the physical, chemical and toxicological characteristics	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

Information on toxicological effects

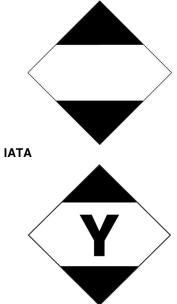
Acute toxicity	Harmful if inhaled.		
Components	Species		Test Results
Methyl Methacrylate (CAS 80-62	2-6)		
<u>Acute</u>			
Inhalation			
LC50	Mouse		18.5 mg/l, 2 Hours
Oral			
LD50	Rat		7800 mg/kg
Skin corrosion/irritation	Causes skin irritation.		
Serious eye damage/eye irritation	Causes serious eye irritation.		
Respiratory or skin sensitizati	on		
ACGIH sensitization			
METHYL METHACRYL	_ATE (CAS 80-62-6)	Dermal sensitization	
Respiratory sensitization	Not a respiratory sensitizer.		
Skin sensitization	May cause an allergic skin rea	action.	

Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	Not classifiable as to carcinogenicity to humans.
IARC Monographs. Overall I	Evaluation of Carcinogenicity
	S 80-62-6) 3 Not classifiable as to carcinogenicity to humans. d Substances (29 CFR 1910.1001-1053)
Not listed. US. National Toxicology Pro Not listed.	ogram (NTP) Report on Carcinogens
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	May cause respiratory irritation.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not an aspiration hazard.
Chronic effects	Prolonged inhalation may be harmful.
12. Ecological information	n
Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Persistence and degradability	No data is available on the degradability of any ingredients in the mixture.
Bioaccumulative potential	
Partition coefficient n-octan Methyl Methacrylate	nol / water (log Kow) 1.38
Mobility in soil	No data available.
Other adverse effects	The product contains volatile organic compounds which have a photochemical ozone creation potential.
13. Disposal consideratio	ns
Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the material under controlled conditions in an approved incinerator. Do not incinerate sealed containers. If discarded, this product is considered a RCRA ignitable waste, D001. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	D001: Waste Flammable material with a flash point <140 F The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.
14. Transport information	
DOT	

DOT		
UN nu	mber	UN1133
UN pro	oper shipping name	Adhesives, containing a flammable liquid, Limited Quantity
Transp	oort hazard class(es)	
Cl	ass	3
Sı	ıbsidiary risk	-
La	bel(s)	3
Packin	ig group	
Specia	I precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Specia	I provisions	B1, B52, IB3, T2, TP1
Packa	ging exceptions	150
Packa	ging non bulk	173
Packa	ging bulk	242

ΙΔΤΔ

ΙΑΤΑ	
UN number	UN1133
UN proper shipping name	Adhesives containing flammable liquid, Limited Quantity
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	
Environmental hazards	No.
ERG Code	3L
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo	Allowed with restrictions.
aircraft	
Cargo aircraft only	Allowed with restrictions.
IMDG	
UN number	UN1133
UN proper shipping name	ADHESIVES containing flammable liquid, Limited Quantity
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	
Environmental hazards	
Marine pollutant	No.
EmS	F-E, S-D
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Transport in bulk according to	Not established.
Annex II of MARPOL 73/78 and	
the IBC Code	
DOT; IMDG	



15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

% 1.0

Listed.

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration

Methyl Methacrylate (CAS 80-62-6)

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

Methyl Methacrylate (CAS 80-62-6)

Toxic Substances Control Act (TSCA)

TSCA Section 12(b) Exp	port Notification (40 CFR	707, Subpt. D)		
Not regulated.				
CERCLA Hazardous Substa	nce List (40 CFR 302.4)			
Methyl Methacrylate (CA SARA 304 Emergency relea	,	Listed.		
Not regulated.				
OSHA Specifically Regulate Not listed.	d Substances (29 CFR 19	910.1001-1053)		
Superfund Amendments and Re SARA 302 Extremely hazard		ô (SARA)		
Not listed.				
SARA 311/312 Hazardous chemical	Yes			
Classified hazard categories	Flammable (gases, aero Acute toxicity (any route Skin corrosion or irritatio Serious eye damage or Respiratory or skin sens Specific target organ tox Hazard not otherwise cla	of exposure) n eye irritation itization icity (single or repea		
SARA 313 (TRI reporting)				
Chemical name		CAS number	% by wt.	
Methyl Methacrylate		80-62-6	60 - 80	
Other federal regulations				
Clean Air Act (CAA) Section		itants (HAPs) List		
Methyl Methacrylate (CA	,	De Brovention (40 C	ED 60 120)	
Clean Air Act (CAA) Section Not regulated.			rn 00.130)	
Safe Drinking Water Act (SDWA)	Contains component(s)	regulated under the	Safe Drinking Water Act.	
FEMA Priority Substand	es Respiratory Health ar	nd Safety in the Fla	vor Manufacturing Workpl	lace
Methyl Methacrylate	(CAS 80-62-6)	Low priority		
US state regulations				
California Proposition 65				
Ca		nd birth defects or ot	ing BUTADIENE, which is k her reproductive harm. For	
California Proposition 6	5 - CRT: Listed date/Car	cinogenic substand	ce	
(CAS 107-13-1)	ylonitrile, Cyanoethylene	Listed: July 1		
BUTADIENE (CAS 1		Listed: April		
Ethyl Acrylate (CAS STYRENE (CAS 100		Listed: July 1 Listed: April 2		
	5 - CRT: Listed date/Dev		22, 2010	
BUTADIENE (CAS 1		Listed: April	16, 2004	
California Proposition 6	5 - CRT: Listed date/Fem	ale reproductive to	oxin	
BUTADIENE (CAS 1	,	Listed: April		
•	5 - CRT: Listed date/Mal	-		
BUTADIENE (CAS 1 US. California. Candida		Listed: April Consumer Product	16, 2004 s Regulations (Cal. Code	Reas, tit. 22, 69502.3,
subd. (a))			C (
Methyl Methacrylate	(UAS 8U-02-0)			
International Inventories				
Country(s) or region	Inventory name	homioal Cubatana		On inventory (yes/no)*
Australia	Australian Inventory of C		S (AICS)	Yes
Canada	Domestic Substances Li	ST (DSL)		No

Country(s) or region	Inventory name O	n inventory (yes/no)*
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes
	where the state of	·····

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	06-05-2019
Version #	01
HMIS® ratings	Health: 2 Flammability: 3 Physical hazard: 0
NFPA ratings	Health: 2 Flammability: 3 Instability: 0
Disclaimer	ITW Performance Polymers cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. 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. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release.

SAFETY DATA SHEET

1. Identification

Product identifier	PLEXUS® MA310 Adhe	sive	
Other means of identification			
SKU#	0930T		
Recommended use	Not available.		
Recommended restrictions	None known.		
Manufacturer/Importer/Supplier/Distributor information			
Manufacturer			
Company name	ITW Performance Polyn	ers	
Address	130 Commerce Drive		
	Montgomeryville, PA 18	936	
	United States		
Telephone	Customer Service	215-855-8450	
Website	www.itwperformancepol	/mers.com	
E-mail	Not available.		
Contact person	EHS Department		
Emergency phone number	CHEMTREC	800-424-9300	
5 7.	International	703-527-3887	

Physical hazards Flammable liquids Category 2 **Health hazards** Acute toxicity, inhalation Category 4 Skin corrosion/irritation Category 2 Serious eye damage/eye irritation Category 2A Sensitization, skin Category 1A Specific target organ toxicity, single exposure Category 3 respiratory tract irritation Not classified. **Environmental hazards OSHA** defined hazards Not classified.

Label elements

Signal word

Danger	

Hazard statement Highly flammable liquid and vapor. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Harmful if inhaled. May cause respiratory irritation. **Precautionary statement** Prevention 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. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/eye protection/face protection. Response If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor if you feel unwell. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. In case of fire: Use appropriate media to extinguish. Keep cool. Store in a well-ventilated place. Keep container tightly closed. Store locked up. Storage

Static accumulating flammable liquid can become electrostatically charged even in bonded and

grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.

None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Methyl Methacrylate		80-62-6	60 - 80
CHLOROSULFINATED POLYETHLENE		68037-39-8	10 - 20
DIISODECYL ADIPATE		27178-16-1	1 - 2.5
MALEIC ACID		110-16-7	1 - 2.5
Phenol, 2,6-bis(1,1-dimethylethyl)-4-meth	yl-	128-37-0	1 - 2.5
Other components below reportal	ole levels		10 - 20

4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a poison center or doctor/physician if you feel unwell.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General information	Take off all contaminated clothing immediately. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

<u> </u>	
Suitable extinguishing media	Water fog. Foam. Carbon dioxide (CO2). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly grounded containers. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water. During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	Highly flammable liquid and vapor.

6. Accidental release measures

6. Accidental release mea	6. Accidental release measures				
Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist/vapors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Use appropriate containment to avoid environmental contamination. Transfer by mechanical means such as vacuum truck to a salvage tank or other suitable container for recovery or safe disposal. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.				
Methods and materials for containment and cleaning up	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools.				
	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.				
	Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.				
	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.				
Environmental precautions	Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.				
7. Handling and storage					
Precautions for safe handling	Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. Explosion-proof general and local exhaus ventilation. Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Avoid breathing mist/vapors. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.				
	For additional information on equipment bonding and grounding, refer to the Canadian Electrical Code in Canada, (CSA C22.1), or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents" or National Fire Protection Association (NFPA) 77, "Recommended Practice on Static Electricity" or National Fire Protection Association (NFPA) 70, "National Electrical Code".				
Conditions for safe storage, including any incompatibilities	Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Eliminate sources of ignition. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).				

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

Components	Туре	Value	
Methyl Methacrylate (CAS 80-62-6)	PEL	410 mg/m3	
		100 ppm	

Components	Туре	Value	Form
Methyl Methacrylate (CAS 80-62-6)	STEL	100 ppm	
	TWA	50 ppm	
Phenol, 2,6-bis(1,1-dimethylethyl)-4- methyl- (CAS 128-37-0)	TWA	2 mg/m3	Inhalable fraction and vapor.
US. NIOSH: Pocket Guide to	Chemical Hazards		
Components	Туре	Value	
Methyl Methacrylate (CAS 80-62-6)	TWA	410 mg/m3	
		100 ppm	
Phenol, 2,6-bis(1,1-dimethylethyl)-4- methyl- (CAS 128-37-0)	TWA	10 mg/m3	
logical limit values	No biological exposure limits noted	for the ingredient(s).	
propriate engineering htrols	Explosion-proof general and local exhaust ventilation. Good general ventilation should be used Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommender exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station and safety shower.		
ividual protection measures,	such as personal protective equip	nent	
Eye/face protection	Chemical respirator with organic va	por cartridge and full facepiece	
Skin protection Hand protection	Wear appropriate chemical resistan	t gloves.	
Other	Wear appropriate chemical resistan	t clothing.	
Respiratory protection	Chemical respirator with organic va	oor cartridge and full facepiece	
Thermal hazards	Wear appropriate thermal protective	clothing, when necessary.	
neral hygiene nsiderations	When using do not smoke. Always or after handling the material and before clothing and protective equipment to be allowed out of the workplace.	re eating, drinking, and/or smo	king. Routinely wash work

9. Physical and chemical properties

Appearance	Paste.
Physical state	Liquid.
Form	Paste.
Color	Off-white.
Odor	Fragrant
Odor threshold	Not available.
рН	Not available.
Melting point/freezing point	-54.4 °F (-48 °C) estimated
Initial boiling point and boiling range	212.9 °F (100.5 °C) estimated
Flash point	50.0 °F (10.0 °C) estimated
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or exp	losive limits
Flammability limit - lower (%)	2.1 %
Flammability limit - upper (%)	12.5 %
Explosive limit - lower (%)	Not available.

Explosive limit - upper (%)	Not available.
Vapor pressure	28 mm Hg @ 68 F
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	0.97 g/cm3 estimated
Explosive properties	Not explosive.
Flammability class	Flammable IB estimated
Oxidizing properties	Not oxidizing.
Specific gravity	0.97 estimated

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents. Nitrates. Peroxides.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of e	exposure	
Inhalation	Harmful if inhaled.	
Skin contact	Causes skin irritation. Ma	ay cause an allergic skin reaction.
Eye contact	Causes serious eye irrita	tion.
Ingestion	Knowledge about health	hazard is incomplete.
Symptoms related to the physical, chemical and toxicological characteristics		nptoms may include stinging, tearing, redness, swelling, and blurred atory irritation. Skin irritation. May cause redness and pain. May cause an rmatitis. Rash.
Information on toxicological eff	ects	
Acute toxicity	Harmful if inhaled.	
Components	Species	Test Results
MALEIC ACID (CAS 110-16-7)		
Acute		
Dermal		
LD50	Rabbit	1560 mg/kg
Oral		
LD50	Rat	708 mg/kg
Methyl Methacrylate (CAS 80-62-	6)	
Acute		
Inhalation		
LC50	Mouse	18.5 mg/l, 2 Hours

Components	Species	Test Results
Oral	_	
LD50	Rat	7800 mg/kg
Phenol, 2,6-bis(1,1-dimethylethyl)	-4-methyl- (CAS 128-37-0)	
<u>Acute</u>		
Oral		"
LD50	Rat	890 mg/kg
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/eye irritation	Causes serious eye irritat	ion.
Respiratory or skin sensitizatio	n	
ACGIH sensitization		
METHYL METHACRYLA	TE (CAS 80-62-6)	Dermal sensitization
Respiratory sensitization	Due to partial or complete	e lack of data the classification is not possible.
Skin sensitization	May cause an allergic ski	n reaction.
Germ cell mutagenicity	Due to partial or complete	e lack of data the classification is not possible.
Carcinogenicity	Due to partial or complete	e lack of data the classification is not possible.
IARC Monographs. Overall	Evaluation of Carcinogeni	city
Methyl Methacrylate (CA Phenol, 2,6-bis(1,1-dime (CAS 128-37-0)		3 Not classifiable as to carcinogenicity to humans. 3 Not classifiable as to carcinogenicity to humans.
OSHA Specifically Regulate	ed Substances (29 CFR 191	10.1001-1053)
Not listed.		
US. National Toxicology Pro	ogram (NTP) Report on Ca	rcinogens
Not listed.		
Reproductive toxicity	Due to partial or complete	e lack of data the classification is not possible.
Specific target organ toxicity - single exposure	May cause respiratory irrit	tation.
Specific target organ toxicity - repeated exposure	Due to partial or complete	e lack of data the classification is not possible.
Aspiration hazard	Due to partial or complete	e lack of data the classification is not possible.
Chronic effects	Prolonged inhalation may	be harmful.
12. Ecological informatio	n	
, v		ed as environmentally hazardous. However, this does not exclude the
Ecotoxicity		equent spills can have a harmful or damaging effect on the environment
Persistence and degradability		e degradability of any ingredients in the mixture.
Bioaccumulative potential		
Partition coefficient n-octar	nol / water (log Kow)	
MALEIC ACID		-0.48
Methyl Methacrylate		1.38
Mobility in soil	No data available.	
Other adverse effects		mental effects (e.g. ozone depletion, photochemical ozone creation ption, global warming potential) are expected from this component.
13. Disposal consideration	ons	
Disposal instructions	material under controlled containers. If discarded, the second se	pose in sealed containers at licensed waste disposal site. Incinerate th conditions in an approved incinerator. Do not incinerate sealed his product is considered a RCRA ignitable waste, D001. Dispose of ordance with local/regional/national/international regulations.
Local disposal regulations		ith all applicable regulations.
Hazardous waste code	D001: Waste Flammable	material with a flash point <140 F e assigned in discussion between the user, the producer and the waste

Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

DOT	
UN number	UN1133
UN proper shipping name	Adhesives, containing a flammable liquid, Limited Quantity
Transport hazard class(es)	
Class	3
Subsidiary risk	- · · · · · · · · · · · · · · · · · · ·
Label(s)	3
Packing group	
	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	B1, B52, IB3, T2, TP1
Packaging exceptions	150
Packaging non bulk	173
Packaging bulk	242
IATA	
UN number	UN1133
UN proper shipping name	Adhesives containing flammable liquid, Limited Quantity
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	
Environmental hazards	No.
ERG Code	3L
	Read safety instructions, SDS and emergency procedures before handling.
Other information	riedd salety instructions, obo and emergency procedures before handling.
Passenger and cargo	Allowed with restrictions.
aircraft	Allowed with restrictions.
Cargo aircraft only	Allowed with restrictions.
IMDG	
UN number	UN1133
UN proper shipping name	ADHESIVES containing flammable liquid, Limited Quantity
Transport hazard class(es)	Abrielovelo containing nanimable ilquid, Einined Quantity
Class	3
Subsidiary risk	-
Packing group	
Environmental hazards	111
	No.
Marine pollutant EmS	F-E, S-D
-	Read safety instructions, SDS and emergency procedures before handling.
Transport in bulk according to	Not established.
Annex II of MARPOL 73/78 and	NOT ESTADIISTIEU.
the IBC Code	
DOT; IMDG	



15. Regulatory information This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication **US** federal regulations Standard, 29 CFR 1910.1200. US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration Methyl Methacrylate (CAS 80-62-6) % 1.0 US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance Methyl Methacrylate (CAS 80-62-6) Listed. **Toxic Substances Control Act (TSCA)** TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) Not regulated. CERCLA Hazardous Substance List (40 CFR 302.4) MALEIC ACID (CAS 110-16-7) Listed. Methyl Methacrylate (CAS 80-62-6) Listed. SARA 304 Emergency release notification Not regulated. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) Not listed. Superfund Amendments and Reauthorization Act of 1986 (SARA) SARA 302 Extremely hazardous substance Not listed. SARA 311/312 Hazardous Yes chemical **Classified hazard** Flammable (gases, aerosols, liquids, or solids) Acute toxicity (any route of exposure) categories Skin corrosion or irritation Serious eye damage or eye irritation Respiratory or skin sensitization Specific target organ toxicity (single or repeated exposure) Hazard not otherwise classified (HNOC) SARA 313 (TRI reporting) **Chemical name** CAS number % by wt. Methyl Methacrylate 80-62-6 60 - 80 Other federal regulations Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List Methyl Methacrylate (CAS 80-62-6) Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) Not regulated. Safe Drinking Water Act Contains component(s) regulated under the Safe Drinking Water Act. (SDWA) FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace Methyl Methacrylate (CAS 80-62-6) Low priority **US** state regulations **California Proposition 65** WARNING: This product can expose you to chemicals including BUTADIENE, which is known to the State of



California Proposition 65 - CRT: Listed date/Carcinogenic substance

2-Propenenitrile; Acrylonitrile, Cyanoethylene (CAS 107-13-1)	Listed: July 1, 1987
BUTADIENE (CAS 106-99-0)	Listed: April 1, 1988
Cumene (CAS 98-82-8)	Listed: April 6, 2010
Ethyl Acrylate (CAS 140-88-5)	Listed: July 1, 1989
STYRENE (CAS 100-42-5)	Listed: April 22, 2016
California Proposition 65 - CRT: Listed date/Develo	opmental toxin
BUTADIENE (CAS 106-99-0)	Listed: April 16, 2004
California Proposition 65 - CRT: Listed date/Female	e reproductive toxin
BUTADIENE (CAS 106-99-0)	Listed: April 16, 2004
California Proposition 65 - CRT: Listed date/Male r	eproductive toxin
BUTADIENE (CAS 106-99-0)	Listed: April 16, 2004
US. California. Candidate Chemicals List. Safer Co	nsumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3,
subd. (a))	
Methyl Methacrylate (CAS 80-62-6)	

Methyl Methacrylate (CAS 80-62-6)

International Inventories

Country(s) or region	Inventory name On inventor	ory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes
		(-)

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	05-26-2019
Version #	01
HMIS® ratings	Health: 2 Flammability: 3 Physical hazard: 0
NFPA ratings	Health: 2 Flammability: 3 Instability: 0
Disclaimer	ITW Performance Polymers cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. 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. The information, disposal and release.