SAFETY DATA SHEET

1. Identification

Product identifier	PLEXUS® MA2230 Ad	hesive	
Other means of identification			
SKU#	0657		
Recommended use	Not available.		
Recommended restrictions	None known.		
Manufacturer/Importer/Supplie	er/Distributor information		
Manufacturer			
Company name	ITW Performance Poly	ners	
Address	30 Endicott Street		
	Danvers, MA 01923		
	United States		
Telephone	Customer Service	978-777-1100	
Website	www.itwperformancepo	lymers.com	
E-mail	Not available.		
Contact person	EHS Department		
Emergency phone number	Chemtrec	800-424-9300	
5 71	International	703-527-3887	

2. Hazard(s) identification

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



Signal word	Danger
Hazard statem	Highly flammable liquid and vapor. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. May cause respiratory irritation.
Precautionary	statement
Prevention	n 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. Immediately call a poison center/doctor. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. In case of fire: Use appropriate media to extinguish.
Storage	Keep cool. Store in a well-ventilated place. Keep container tightly closed. Store locked up.
Disposal	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.

Supplemental information

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Methyl Methacrylate		80-62-6	40 - 60
Polyvinyl Acetate		Mixture	10 - 20
Benzyl 3-isobutyryloxy-1-isopropyl-2,2-dim ethylpropyl Phthalate		16883-83-3	2.5 - 10
METHACRYLIC ACID		79-41-4	2.5 - 10
STYRENE, ISOPRENE COPOLYMER		25038-32-8	1 - 2.5
Other components below reportable le	evels		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. 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 immediately.
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. Permanent eye damage including blindness could result. 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 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 exhaust 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. Do not get this material in contact with eyes. Avoid breathing mist/vapors. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. 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	

METHACRYLIC ACID (CAS 79-41-4)TWAMethyl Methacrylate (CAS 80-62-6)STEL TWAUS. NIOSH: Pocket Guide to Chemical Hazards ComponentsComponentsTypeMETHACRYLIC ACID (CAS 79-41-4)TWAMethyl Methacrylate (CAS 80-62-6)TWA	20 ppm 100 ppm 50 ppm Value 70 mg/m3 20 ppm 410 mg/m3 100 ppm the ingredient(s).	
80-62-6) TWA US. NIOSH: Pocket Guide to Chemical Hazards Components METHACRYLIC ACID (CAS 79-41-4) Methyl Methacrylate (CAS TWA	50 ppm Value 70 mg/m3 20 ppm 410 mg/m3 100 ppm	
US. NIOSH: Pocket Guide to Chemical Hazards ComponentsMETHACRYLIC ACID (CAS 79-41-4)TWAMethyl Methacrylate (CASTWA	Value 70 mg/m3 20 ppm 410 mg/m3 100 ppm	
ComponentsTypeMETHACRYLIC ACID (CAS 79-41-4)TWAMethyl Methacrylate (CASTWA	70 mg/m3 20 ppm 410 mg/m3 100 ppm	
METHACRYLIC ACID (CAS TWA 79-41-4) Methyl Methacrylate (CAS TWA	70 mg/m3 20 ppm 410 mg/m3 100 ppm	
79-41-4) Methyl Methacrylate (CAS TWA	20 ppm 410 mg/m3 100 ppm	
	410 mg/m3 100 ppm	
	100 ppm	
	the ingredient(s).	
Biological limit values No biological exposure limits noted for		
Exposure guidelines		
US - California OELs: Skin designation		
METHACRYLIC ACID (CAS 79-41-4) Can be US - Tennessee OELs: Skin designation	e absorbed through the skin.	
METHACRYLIC ACID (CAS 79-41-4) Can be US NIOSH Pocket Guide to Chemical Hazards: Skin designation	e absorbed through the skin.	
METHACRYLIC ACID (CAS 79-41-4) Can be	absorbed through the skin.	
controls Ventilation rates should be matched to exhaust ventilation, or other engineering	aust ventilation. Good general ventilation should be used. conditions. If applicable, use process enclosures, local ng controls to maintain airborne levels below recommended not been established, maintain airborne levels to an tion and safety shower.	
Individual protection measures, such as personal protective equipme Eye/face protection Chemical respirator with organic vapor		
Skin protection Hand protection Wear appropriate chemical resistant g	loves.	
	Wear appropriate chemical resistant clothing. Chemical respirator with organic vapor cartridge and full facepiece.	
	Wear appropriate thermal protective clothing, when necessary.	
considerations after handling the material and before	serve good personal hygiene measures, such as washing eating, drinking, and/or smoking. Routinely wash work emove contaminants. Contaminated work clothing should not	
9. Physical and chemical properties		
Appearance Paste.		
Physical state Liquid.		
Form Paste.		
Color Natural color.		
Odor Not available.		
Odor threshold Not available.		
рН 5-6		

рН	5 - 6
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 explosive limits

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	45.25 hPa estimated
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	0.95 g/cm3 estimated
Explosive properties	Not explosive.
Flammability class	Flammable IB estimated
Oxidizing properties	Not oxidizing.
Specific gravity	0.95 estimated

10. Stability and reactivity

2	•
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	May cause irritation to the respiratory system. Prolonged inhalation may be harmful.		
Skin contact	Causes skin irritation. M	ay cause an allergic skin reaction.	
Eye contact	Causes serious eye dan	Causes serious eye damage.	
Ingestion	Expected to be a low ing	Expected to be a low ingestion hazard.	
Symptoms related to the physical, chemical and toxicological characteristics	vision. Permanent eye d	e eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred . Permanent eye damage including blindness could result. May cause respiratory irritation. rritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis.	
Information on toxicological ef	fects		
Acute toxicity	Not known.		
Components	Species	Test Results	

Methyl Methacrylate (CAS 80-62-6)

Mouse

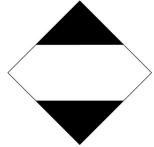
18.5 mg/l, 2 Hours

Inhalation LC50

Components	Species	Test Results
Oral		
LD50	Rat	7800 mg/kg
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/eye irritation	Causes serious eye damage.	
Respiratory or skin sensitization	n	
ACGIH sensitization		
METHYL METHACRYLA	TE (CAS 80-62-6)	Dermal sensitization
Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitization	May cause an allergic skin re	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 carcino	genicity to humans.
IARC Monographs. Overall	Evaluation of Carcinogenicity	
	S 80-62-6) d Substances (29 CFR 1910.1	3 Not classifiable as to carcinogenicity to humans. 001-1052)
	ogram (NTP) Report on Carcin	ogens
Not listed. Reproductive toxicity	This product is not expected t	to cause reproductive or developmental effects.
•		
Specific target organ toxicity - single exposure	May cause respiratory irritation.	
Specific target organ toxicity - epeated 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 Bioaccumulative potential	No data is available on the de	egradability of any ingredients in the mixture.
Partition coefficient n-octar	ol / water (log Kow)	
METHACRYLIC ACID Methyl Methacrylate		0.93 1.38
Mobility in soil	No data available.	
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.	
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 a	
Hazardous waste code	D001: Waste Flammable material with a flash point <140 F D002: Waste Corrosive material [pH <=2 or =>12.5, or corrosive to steel] 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 emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.	

14. Transport information

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	ll
Special precautions for use	r Read safety instructions, SDS and emergency procedures before handling.
Special provisions	149, B52, IB2, T4, TP1, TP8
Packaging exceptions	150
Packaging non bulk	173
Packaging bulk	242
ΙΑΤΑ	
UN number	UN1133
UN proper shipping name	Adhesives containing flammable liquid, Limited Quantity
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	ll
Environmental hazards	No.
ERG Code	3L
	r 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	
UN proper shipping name	ADHESIVES containing flammable liquid, Limited Quantity
Transport hazard class(es)	•
Class	3
Subsidiary risk	-
Packing group	ll
Environmental hazards	
Marine pollutant	No.
EmS	F-E, S-D
	r Read safety instructions, SDS and emergency procedures before handling.
Transport in bulk according to Annex II of MARPOL 73/78 and	Not established.
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. IIS EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration

Other federal regulations			
Methyl Methacrylate		80-62-6	40 - 60
Chemical name		CAS number	% by wt.
SARA 313 (TRI reporting)			
categories	Respiratory or ski Specific target org	ge or eye irritation	ed exposure)
Classified hazard		s, aerosols, liquids, or solids	3)
SARA 311/312 Hazardous chemical	Yes		
Not listed.			
uperfund Amendments and Re SARA 302 Extremely hazard		of 1986 (SARA)	
Not regulated.			
OSHA Specifically Regulate	d Substances (29 (CFR 1910.1001-1052)	
Not regulated.			
Methyl Methacrylate (CA SARA 304 Emergency relea	,	Listed.	
CERCLA Hazardous Substa	·	U2.4) Listed.	
Not regulated.		00 A)	
TSCA Section 12(b) Exp	port Notification (40) CFR 707, Subpt. D)	
Toxic Substances Control A	. ,		
Methyl Methacrylate	, i	Listed.	
•		oxic Chemical: Listed sub	stance
Methyl Methacrylate	· /	% 1.0	
US EPCRA (SARA Title	III) Section 313 - 10	oxic Chemical: De minimis	concentration

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.
```

Contains component(s) regulated under the Safe Drinking Water Act. 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 Ethylene Glycol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Developmental toxin

Ethylene Glycol (CAS 107-21-1)

Listed: June 19, 2015

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Methyl Methacrylate (CAS 80-62-6)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
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)	No
New Zealand	New Zealand Inventory	No
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	05-09-2019
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

1. Identification			
Product identifier	PLEXUS® MA2045/2145/2090 Black Activator		
Other means of identification			
SKU#	0735		
Recommended use	Not available.		
Recommended restrictions	None known.		
Manufacturer/Importer/Supplier	/Distributor information		
Manufacturer			
Company name Address	ITW Performance Polymers 30 Endicott Street Danvers, MA 01923		
Telephone	United States 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	n		
Physical hazards	Not classified.		
Health hazards	Skin corrosion/irritation Category 2		
	Serious eye damage/eye irritation Category 2A		
	Sensitization, skin Category 1		
	Specific target organ toxicity, single exposure Category 3 respiratory tract irritation		
Environmental hazards	Not classified.		
OSHA defined hazards	Not classified.		
Label elements	\wedge		
Signal word	Warning		
Hazard statement	Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause respiratory irritation.		
Precautionary statement			
Prevention	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 eye protection/face protection. Wear protective gloves.		
Response	If on skin: Wash with plenty of water. 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.		
Storage	Store in a well-ventilated place. Keep container tightly closed. Store locked up.		
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.		
Hazard(s) not otherwise classified (HNOC)	None known.		
Cumula mental information	Nama		

Supplemental information

None.

3. Composition/information on ingredients

Mixtures			
Chemical name	Common name and synonyms	CAS number	%
Benzyl 3-isobutyryloxy-1-isopropyl-2,2-dim ethylpropyl Phthalate		16883-83-3	20 - 40
DIBUTYL MALEATE		105-76-0	20 - 40
ACRYLONITRILE STYRENE ACRYLATE COPOLYMER		26299-47-8	10 - 20
Dibenzoyl Peroxide		94-36-0	2.5 - 10
ISODECYL BENZOATE		131298-44-7	2.5 - 10
Oxirane, Methyl-, Polymer With Oxirane, Monobutyl Ether		9038-95-3	1 - 2.5
Other components below reportable	elevels		2.5 - 10

*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. Call a poiso 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. Keep victim under observation. Symptoms may be delayed.	
General information	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. Was contaminated clothing before reuse.	
5. Fire-fighting measures		
Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).	
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.	
Specific hazards arising from	During fire, gases hazardous to health may be formed.	

the chemical	
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	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	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. 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. Ensure adequate ventilation. 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	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Small Spills: 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.	
7. Handling and storage		
Precautions for safe handling	Avoid breathing mist/vapors. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.	
Conditions for safe storage, including any incompatibilities	Store locked up. Store in tightly closed container. 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	
Dibenzoyl Peroxide (CAS 94-36-0)	PEL	5 mg/m3	
US. ACGIH Threshold Limi	t Values		
Components	Туре	Value	
Dibenzoyl Peroxide (CAS 94-36-0)	TWA	5 mg/m3	
US. NIOSH: Pocket Guide t	o Chemical Hazards		
Components	Туре	Value	
Dibenzoyl Peroxide (CAS 94-36-0)	TWA	5 mg/m3	
ological limit values	No biological exposure limits noted	for the ingredient(s).	
propriate engineering ntrols	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 recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station and safety shower.		
•	s, such as personal protective equip		
Eye/face protection	Chemical respirator with organic va	apor cartridge and full facepiece.	
Skin protection Hand protection	Wear appropriate chemical resistant gloves.		
Other	Wear appropriate chemical resistant clothing.		
Respiratory protection	Chemical respirator with organic vapor cartridge and full facepiece.		
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.		
neral hygiene nsiderations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.		

- ,		
Appearance	Liquid.	
Physical state	Liquid.	
Form	Liquid.	
Color	Black.	
Odor	Mild. Ester-like.	

Odor threshold	Not available.
рН	6 - 8
Melting point/freezing point	217.4 °F (103 °C) estimated
Initial boiling point and boiling range	Not available.
Flash point	285.8 °F (141.0 °C) estimated
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or exp	losive limits
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	< 0.5 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	176 °F (80 °C) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	1.16 g/cm3 estimated
Explosive properties	Not explosive.
Flammability class	Combustible IIIB estimated
Oxidizing properties	Not oxidizing.
Specific gravity	1.16 estimated
10. Stability and reactivity	1
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	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with incompatible materials.

Hazardous decomposition No hazardous decomposition products are known.

Incompatible materials

11. Toxicological information

Information on likely routes of exposure

Alcohols. Amines.

Inhalation	May cause irritation to the respiratory system. Prolonged inhalation may be harmful.	
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	Not known.		
Components	Species	Test Results	
Dibenzoyl Peroxide (CAS 94-36-0)	-		
<u>Acute</u>			
Oral			
LD50	Rat	7710 mg/kg	
Skin corrosion/irritation	Causes skin irritation.		
Serious eye damage/eye irritation	Causes serious eye irritatior	l.	
Respiratory or skin sensitization	1		
Respiratory sensitization	Not a respiratory sensitizer.		
Skin sensitization	May cause an allergic skin reaction.		
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 carcino	ogenicity to humans.	
IARC Monographs. Overall I	Evaluation of Carcinogenicit	у	
Dibenzoyl Peroxide (CAS OSHA Specifically Regulate		3 Not classifiable as to carcinogenicity to humans. 1001-1052)	
Not regulated. US. National Toxicology Pro Not listed.	gram (NTP) Report on Carci	nogens	
Reproductive toxicity	This product is not expected	to cause reproductive or developmental effects.	
Specific target organ toxicity - single exposure	May cause respiratory irritati	on.	
Specific target organ toxicity - repeated exposure	Not classified.		
Aspiration hazard	Not an aspiration hazard.		
Chronic effects	Prolonged inhalation may be	harmful.	
12. Ecological information			
Ecotoxicity	The product is not classified	as environmentally hazardous. However, this does not exclude the ent spills can have a harmful or damaging effect on the environment.	
Persistence and degradability		legradability of any ingredients in the mixture.	
Bioaccumulative potential			
Partition coefficient n-octan Dibenzoyl Peroxide	ol / water (log Kow)	3.46	
Mobility in soil	No data available.		
Other adverse effects		ntal effects (e.g. ozone depletion, photochemical ozone creation on, global warming potential) are expected from this component.	
13. Disposal consideratio	ns		
Disposal instructions		se in sealed containers at licensed waste disposal site. Dispose of ance with local/regional/national/international regulations.	
Local disposal regulations	Dispose in accordance with	all applicable regulations.	
Hazardous waste code	The waste code should be a disposal company.	ssigned 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 m	ay retain product residue, follow label warnings even after container is hould be taken to an approved waste handling site for recycling or	
14. Transport information			

DOT

Not regulated as dangerous goods.

ΙΑΤΑ

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Not established. Annex II of MARPOL 73/78 and the IBC Code

15. Regulatory information

US federal regulations	This product is a "Haz Standard, 29 CFR 19		defined by the OSHA Hazard Communication
US EPCRA (SARA Tit	le III) Section 313 - Toxic	Chemical: De minim	is concentration
Dibenzoyl Peroxid US EPCRA (SARA Tit	e (CAS 94-36-0) le III) Section 313 - Toxic	% 1.0 • Chemical: Listed su	bstance
Dibenzoyl Peroxid	e (CAS 94-36-0)	Listed.	
Toxic Substances Contro	I Act (TSCA)		
TSCA Section 12(b) E	Export Notification (40 CF	R 707, Subpt. D)	
Not regulated.			
CERCLA Hazardous Subs	tance List (40 CFR 302.4	ł)	
Not listed.	·		
SARA 304 Emergency rele	ease notification		
Not regulated. OSHA Specifically Regula	ited Substances (29 CFR	1910.1001-1052)	
Not regulated.			
Superfund Amendments and SARA 302 Extremely haza		986 (SARA)	
Not listed.			
SARA 311/312 Hazardous chemical	Yes		
Classified hazard categories	Skin corrosion or irrita Serious eye damage o Respiratory or skin se Specific target organ t	or eye irritation	ated exposure)
SARA 313 (TRI reporting)			
Chemical name		CAS number	% by wt.
Dibenzoyl Peroxide		94-36-0	2.5 - 10
Other federal regulations			
Clean Air Act (CAA) Secti	on 112 Hazardous Air Po	ollutants (HAPs) List	
Not regulated. Clean Air Act (CAA) Secti	on 112(r) Accidental Rele	ease Prevention (40 C	CFR 68.130)
Not regulated.			
Safe Drinking Water Act (SDWA)	Not regulated.		
US state regulations			
California Proposition 65			
	which is known to the Stat	e of California to cause e of California to cause	ling 2-Propenenitrile; Acrylonitrile, Cyanoethylene, e cancer, and DIISODECYL PHTHALATE (DIDP), e birth defects or other reproductive harm. For v.
California Proposition	n 65 - CRT: Listed date/C	arcinogenic substan	ce
	crylonitrile, Cyanoethylen		
STYRENE (CAS 1	00-42-5)	Listed: April	22, 2016

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
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	04-25-2019
Version #	01
HMIS® ratings	Health: 2 Flammability: 1 Physical hazard: 0
NFPA ratings	Health: 2 Flammability: 1 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.