SAFETY DATA SHEET

1. Identification					
Product identifier	PLEXUS® MA330 Adhesive				
Other means of identification	Other means of identification				
SKU#	IT731				
Recommended use	Not available.				
Recommended restrictions	None known.				
Manufacturer/Importer/Supplier	/Distributor information				
Company name	ITW Performance Polymers				
Address	35 Brownridge Rd				
	Unit 1				
	Halton Hills, ON L7G 0C6				
Contact person	Customer Service				
Telephone number	978-777-1100				
Fax					
E-mail					
Emergency telephone number	800-424-9300				
Supplier	Not available.				
2. Hazard identification					
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 following single exposure	Category 3 respiratory tract irritation			
Environmental hazards	Not classified.				
Label elements					
Signal word	Danger				
Hazard statement	Highly flammable liquid and vapour. Causes s Causes serious eye irritation. Harmful if inhale	skin irritation. May cause an allergic skin reaction. ed. May cause respiratory irritation.			
Precautionary statement					
Prevention	Keep container tightly closed. Ground and bo explosion-proof electrical/ventilating/lighting e prevent static discharges. Wash thoroughly a	quipment. Use non-sparking tools. Take action to fee handling. Use only outdoors or in a ing should not be allowed out of the workplace.			

Response	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with 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 CENTRE/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.
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.
Other hazards	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Methyl methacrylate		80-62-6	40 - 70
CHLOROSULFINATED POLYETHLENE		68037-39-8	15 - 40
Maleic acid		110-16-7	1 - 5
Titanium dioxide	Titanium dioxide	13463-67-7	1 - 5
BUTYLATED HYDROXYTOLUEN (BHT)	IE	128-37-0	0.5 - 1.5
Cumene hydroperoxide		80-15-9	0.5 - 1.5
Other components below reportal	ole levels		10 - 30

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

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 centre 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	

Water fog. Foam. Carbon dioxide (CO2). Dry chemical powder, carbon dioxide, sand or earth may Suitable extinguishing media be used for small fires only. Unsuitable extinguishing Do not use water jet as an extinguisher, as this will spread the fire. media Specific hazards arising from Vapours may form explosive mixtures with air. Vapours may travel considerable distance to a source of ignition and flash back. This product is a poor conductor of electricity and can become the chemical 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 vapour.

6. Accidental release measures

o. Accidental release mea	30103
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/vapours. 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/vapours. 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

US. ACGIH Threshold Limit Values				
Components	Туре	Value	Form	
BUTYLATED HYDROXYTOLUENE (BHT) (CAS 128-37-0)	TWA	2 mg/m3	Inhalable fraction and vapor.	
METHYL METHACRYLATE (CAS 80-62-6)	STEL	100 ppm		
	TWA	50 ppm		
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m3		

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Туре	Value	
BUTYLATED HYDROXYTOLUENE (BHT) (CAS 128-37-0)	TWA	10 mg/m3	
METHYL METHACRYLATE (CAS 80-62-6)	STEL	410 mg/m3	
		100 ppm	
	TWA	205 mg/m3	
		50 ppm	
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m3	

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Туре	Value	Form
BUTYLATED HYDROXYTOLUENE (BHT) (CAS 128-37-0)	TWA	2 mg/m3	Vapor and aerosol, inhalable.
METHYL METHACRYLATE (CAS 80-62-6)	STEL	100 ppm	
	TWA	50 ppm	
Titanium dioxide (CAS 13463-67-7)	TWA	3 mg/m3	Respirable fraction.
		10 mg/m3	Total dust.

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

Components	Туре	Value	Form
BUTYLATED HYDROXYTOLUENE (BHT) (CAS 128-37-0)	TWA	2 mg/m3	Inhalable fraction and vapor.
METHYL METHACRYLATE (CAS 80-62-6)	STEL	100 ppm	
	TWA	50 ppm	
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m3	

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components	Туре	Value	Form
BUTYLATED HYDROXYTOLUENE (BHT) (CAS 128-37-0)	TWA	2 mg/m3	Inhalable fraction and vapor.
METHYL METHACRYLATE (CAS 80-62-6)	STEL	100 ppm	
	TWA	50 ppm	

Components		Туре		Value	Form
Titanium dioxide (CAS 13463-67-7)		TWA		10 mg/m3	
Canada. Quebec OELs. (Mir Components	istry of Labor	 Regulation respection Type 	ng occupation	al health and sa Value	fety) Form
BUTYLATED HYDROXYTOLUENE (BHT) (CAS 128-37-0)		TWA		10 mg/m3	
METHYL METHACRYLATE (CAS 80-62-6)		TWA		205 mg/m3	
				50 ppm	
Titanium dioxide (CAS 13463-67-7)		TWA		10 mg/m3	Total dust.
Canada. Saskatchewan OEL Components	s (Occupation	al Health and Safety I Type	Regulations, 1	996, Table 21) Value	Form
BUTYLATED HYDROXYTOLUENE (BHT) (CAS 128-37-0)		15 minute		4 mg/m3	Inhalable fraction and vapor.
		8 hour		2 mg/m3	Inhalable fraction and vapor.
METHYL METHACRYLATE (CAS 80-62-6)		15 minute		100 ppm	·
		8 hour		50 ppm	
Titanium dioxide (CAS 13463-67-7)		15 minute		20 mg/m3	
		8 hour		10 mg/m3	
ogical limit values	No biological	exposure limits noted f	or the ingredier	nt(s).	
ropriate engineering trols	Ventilation rat exhaust ventil exposure limit	es should be matched ation, or other enginee	to conditions. I ring controls to ve not been es	f applicable, use maintain airborn tablished, mainta	ventilation should be used process enclosures, local e levels below recommend in airborne levels to an
vidual protection measures, Eye/face protection	•	nal protective equipn pirator with organic vap		nd full facepiece.	
Skin protection Hand protection	Wear appropr	riate chemical resistant	gloves.		
Other	Wear appropr	riate chemical resistant	clothing.		
Respiratory protection		pirator with organic vap	•	nd full facepiece.	
Thermal hazards	Wear appropr	riate thermal protective	clothing, when	necessary.	
eral hygiene siderations	after handling clothing and p	the material and befor	e eating, drinki	ng, and/or smokii	neasures, such as washing ng. Routinely wash work nated work clothing should
Physical and chemical	properties				
earance	Paste.				
Physical state	Liquid.				
Form	Paste.				
Colour	Off-white.				
our	Fragrant				

Odour	Fragrant
Odour threshold	Not available.
рН	Not available.
Melting point/freezing point	-48 °C (-54.4 °F) estimated

Initial boiling point and boiling range	100.5 °C (212.9 °F) estimated
Flash point	10.0 °C (50.0 °F) estimated
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or exp	plosive limits
Flammability limit - lower (%)	1.7 %
Flammability limit - upper (%)	12.5 %
Explosive limit - lower (%)	Not available.
Explosive limit – upper (%)	Not available.
Vapour pressure	28 mm Hg @ 20 °C
Vapour 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	1.04 g/cm3 estimated
Explosive properties	Not explosive.
Flammability class	Flammable IB estimated
Oxidising properties	Not oxidising.
Specific gravity	1.04 estimated
10. Stability and reactivity	V Contraction of the second seco
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 polymerisation 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 oxidising agents. Nitrates. Peroxides.
Hazardous decomposition products	No hazardous decomposition products are known.
11. Toxicological informa	tion
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Information on likely routes of exposure

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Inhalation	Harmful if inhaled.
Skin contact	Causes skin irritation. May cause an allergic skin reaction.
Eye contact	Causes serious eye irritation.
Ingestion	Knowledge about health hazard is incomplete.
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 ef	fects

Acute	toxicity	
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Harmful if inhaled.

Components	Species	Test Results	
BUTYLATED HYDROXYTOLU	ENE (BHT) (CAS 128-37-0)		
Acute			
Oral			
LD50	Rat	890 mg/kg	
Maleic acid (CAS 110-16-7)			
Acute			
Dermal	Deble	1500	
LD50	Rabbit	1560 mg/kg	
Oral LD50	Rat	708 mg/kg	
Methyl methacrylate (CAS 80-6	2-6)		
Acute			
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 sensitisat	ion		
ACGIH sensitisation			
Methyl methacrylate (0 Canada - Alberta OELs: II	-	Dermal sensitization	
BUTYLATED HYDROXYTOLUENE (BHT) Irritant (CAS 128-37-0)		Irritant	
Titanium dioxide (CAS Canada - British Columbi	13463-67-7) a OELs: Respiratory or skin ser	Irritant Isitiser	
Methyl methacrylate (CAS 80-62-6)		Capable of causing respiratory, dermal or conjunctival sensitization.	
	Hazard: Dermal sensitization		
Methyl methacrylate (C Canada - Quebec OELs: S	-	Dermal sensitization	
Methyl methacrylate (C Canada - Saskatchewan (CAS 80-62-6) DELs Hazard Data: Sensitiser	Sensitiser.	
Methyl methacrylate (C	CAS 80-62-6)	Sensitiser.	
Respiratory sensitisation	Due to partial or complete lac	k of data the classification is not possible.	
Skin sensitisation	May cause an allergic skin re	action.	
Germ cell mutagenicity	bue to partial or complete lack of data the classification is not possible.		
Carcinogenicity	Due to partial or complete lac	k of data the classification is not possible.	
ACGIH Carcinogens			
BUTYLATED HYDRO (CAS 128-37-0)		A4 Not classifiable as a human carcinogen.	
	Methyl methacrylate (CAS 80-62-6) A4 Not classifiable as a human carcinogen.		
Titanium dioxide (CAS Canada - Manitoba OELs		A4 Not classifiable as a human carcinogen.	
BUTYLATED HYDROX (CAS 128-37-0)		Not classifiable as a human carcinogen.	
Methyl methacrylate (0	(CAS 80-62-6) Not classifiable as a human carcinogen.		
Titanium dioxide (CAS	Titanium dioxide (CAS 13463-67-7) Not classifiable as a human carcinogen.		
	Ill Evaluation of Carcinogenicity		
BUTYLATED HYDRO (CAS 128-37-0)	XYTOLUENE (BHT)	3 Not classifiable as to carcinogenicity to humans.	
Methyl methacrylate (C Titanium dioxide (CAS		3 Not classifiable as to carcinogenicity to humans. 2B Possibly carcinogenic to humans.	
Reproductive toxicity		k of data the classification is not possible.	

Specific target organ toxicity - single exposure	May cause respiratory irritation.
Specific target organ toxicity - repeated exposure	Due to partial or complete lack of data the classification is not possible.
Aspiration hazard	Due to partial or complete lack of data the classification is not possible.
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	
Maleic acid	-0.48
Methyl methacrylate	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. 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	The waste code should be assigned in discussion between the user, the producer and the waste
	disposal company.
Waste from residues / unused products	disposal company. 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).
	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:

14. Transport information

TDG **UN number** UN1133 ADHESIVES containing flammable liquid UN proper shipping name Transport hazard class(es) 3 Class Subsidiary risk -Packing group Ш Environmental hazards Not available. Special precautions for user Read safety instructions, SDS and emergency procedures before handling. ΙΑΤΑ **UN number** UN1133 UN proper shipping name Adhesives containing flammable liquid Transport hazard class(es) Class 3 Subsidiary risk _ Ш 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

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	
IATA; IMDG; TDG	

15. Regulatory information

Canadian regulations	This product has been classified in accordance with the hazard crite contains all the information required by the HPR.	eria of the HPR and the SDS
Controlled Drugs and Su	bstances Act	
Not regulated.		
Export Control List (CEP	A 1999, Schedule 3)	
Not listed.		
Greenhouse Gases		
Not listed.	- 41	
Precursor Control Regul	ations	
Not regulated.		
International regulations		
Stockholm Convention		
Not applicable.		
Rotterdam Convention		
Not applicable.		
Kyoto Protocol		
Not applicable. Montreal Protocol		
Not applicable.		
Basel Convention		
Not applicable.		
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)	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

Country(s) or region	Inventory name	On inventory (yes/no)*
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
	nents of this product comply with the inventory requirements administered by the	3 3 3 (7

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

Issue date	27-May-2019
Revision date	28-April-2020
Version No.	02
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.
Revision information	Composition / Information on Ingredients: Component Summary