SAFETY DATA SHEET



1. Identification

Product identifier	DEVCON® R-Flex® II Resin		
Other means of identification			
SKU#	0339B		
Recommended use	Not available.		
Recommended restrictions	None known.		
Manufacturer/Importer/Supplie	er/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	Not classified.		
Health hazards	Skin corrosion/irritation	Category 2	
	Serious eye damage/eye irritation	Category 2	
	Sensitization, respiratory	Category 1	
	Sensitization, skin	Category 1A	
	Carcinogenicity	Category 2	
	Reproductive toxicity	Category 2	
	Specific target organ toxicity following single exposure	Category 3 respiratory tract irritation	
Environmental hazards	Not classified.		
Label elements			
Signal word	Danger		
Hazard statement	Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. Suspected of causing cancer. Suspected of damaging fertility or the unborn child.		
Precautionary statement			
Prevention			

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. IF exposed or concerned: Get medical advice/attention. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. If experiencing respiratory symptoms: Call a POISON CENTRE/doctor. 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.
Other hazards	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
METHYLENE BIS(4-CYCLOHEXYLISOCYANATE)		5124-30-1	15 - 40
METHYL ETHYL KETONE		78-93-3	3 - 7
Methylenediphenyl Diisocyanate (mdi)		26447-40-5	0.5 - 1.5
4,4'-DIPHENYLMETHANE DIISOCYANATE		101-68-8	0.1 - 1
Other components below reportable	levels		60 - 100

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. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If experiencing respiratory symptoms: Call a poison center or doctor/physician.
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. Coughing. Difficulty in breathing. 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 exposed or concerned: Get medical advice/attention. 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. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.
5. Fire-fighting measures	
Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Water. Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	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.

Move containers from fire area if you can do so without risk. equipment/instructions

Use standard firefighting procedures and consider the hazards of other involved materials. Specific methods No unusual fire or explosion hazards noted. General fire hazards

Material name: DEVCON® R-Flex® II Resin

Fire fighting

0339B Version #: 02 Revision date: 30-April-2020 Issue date: 22-May-2019

6. Accidental release measures

6. Accidental release mea	sures
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/vapours. 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. Put material in suitable, covered, labeled containers. 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	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing mist/vapours. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. 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 in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Value Components	US. ACGIH Threshold Limit Values Components Type Value		
	Туре	Value	
4,4'-DIPHENYLMETHANE DIISOCYANATE (CAS 101-68-8)	TWA	0.005 ppm	
METHYL ETHYL KETONE (CAS 78-93-3)	STEL	300 ppm	
	TWA	200 ppm	
METHYLENE BIS(4-CYCLOHEXYLISOC YANATE) (CAS 5124-30-1)	TWA	0.005 ppm	

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

Components	Туре	Value	
4,4'-DIPHENYLMETHANE DIISOCYANATE (CAS 101-68-8)	TWA	0.05 mg/m3	
		0.005 ppm	
METHYL ETHYL KETONE (CAS 78-93-3)	STEL	885 mg/m3	
		300 ppm	
	TWA	590 mg/m3	
		200 ppm	
METHYLENE BIS(4-CYCLOHEXYLISOC YANATE) (CAS 5124-30-1)	TWA	0.05 mg/m3	
		0.005 ppm	

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

Components	Туре	Value
4,4'-DIPHENYLMETHANE DIISOCYANATE (CAS 101-68-8)	Ceiling	0.01 ppm
	TWA	0.005 ppm
METHYL ETHYL KETONE (CAS 78-93-3)	STEL	100 ppm
	TWA	50 ppm
METHYLENE BIS(4-CYCLOHEXYLISOC YANATE) (CAS 5124-30-1)	Ceiling	0.01 ppm
	TWA	0.005 ppm
Methylenediphenyl Diisocyanate (mdi) (CAS 26447-40-5)	Ceiling	0.01 ppm
	TWA	0.005 ppm

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

Components	гуре	value	
4,4'-DIPHENYLMETHANE DIISOCYANATE (CAS 101-68-8)	TWA	0.005 ppm	
METHYL ETHYL KETONE (CAS 78-93-3)	STEL	300 ppm	
	TWA	200 ppm	
METHYLENE BIS(4-CYCLOHEXYLISOC YANATE) (CAS 5124-30-1)	TWA	0.005 ppm	

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

Components	Туре	Value	
4,4'-DIPHENYLMETHANE DIISOCYANATE (CAS 101-68-8)	Ceiling	0.02 ppm	
	TWA	0.005 ppm	
METHYL ETHYL KETONE (CAS 78-93-3)	STEL	300 ppm	
	TWA	200 ppm	
METHYLENE BIS(4-CYCLOHEXYLISOC YANATE) (CAS 5124-30-1)	Ceiling	0.02 ppm	
	TWA	0.005 ppm	

Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety)

Components	Туре	Value	
4,4'-DIPHENYLMETHANE DIISOCYANATE (CAS 101-68-8)	TWA	0.051 mg/m3	
		0.005 ppm	
METHYL ETHYL KETONE (CAS 78-93-3)	STEL	300 mg/m3	
		100 ppm	
	TWA	150 mg/m3	
		50 ppm	
METHYLENE BIS(4-CYCLOHEXYLISOC YANATE) (CAS 5124-30-1)	TWA	0.054 mg/m3	

Canada. Quebec OELs. (M Components	inistry of Labo	Type	Va	
			0.0	05 ppm
Canada. Saskatchewan OB Components	ELs (Occupati	onal Health and Safety I Type	Regulations, 1996 Va	
4,4'-DIPHENYLMETHANE DIISOCYANATE (CAS 101-68-8)		15 minute	0.0	15 ppm
,		8 hour	0.0	05 ppm
METHYL ETHYL KETONE (CAS 78-93-3)		15 minute	300) ppm
		8 hour	200) ppm
METHYLENE BIS(4-CYCLOHEXYLISOC YANATE) (CAS 5124-30-1)		15 minute	0.0	15 ppm
		8 hour	0.0	05 ppm
ological limit values				
ACGIH Biological Exposur Components	e Indices Value	Determinant	Specimen	Sampling Time
METHYL ETHYL KETONE (CAS 78-93-3)	C C	MEK	Urine	*
* - For sampling details, plea	ase see the sou	urce document.		
posure guidelines				
Canada - British Columbia 4,4'-DIPHENYLMETHAI (CAS 101-68-8)		-	be absorbed throu	gh the skin.
propriate engineering ntrols	applicable, maintain air established	use process enclosures, borne levels below recon	local exhaust vent nmended exposure to an acceptable	tes should be matched to conditions. If ilation, or other engineering controls to e limits. If exposure limits have not been level. General ventilation normally
lividual protection measures Eye/face protection		sonal protective equipn espirator with organic vap		full facepiece.
Skin protection Hand protection	Wear appro	opriate chemical resistant	gloves.	
Other	Wear appro	Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.		
Respiratory protection	Chemical re	Chemical respirator with organic vapour cartridge and full facepiece.		
Thermal hazards	Wear appro	Wear appropriate thermal protective clothing, when necessary.		
neral hygiene nsiderations	Observe any medical surveillance requirements. 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.			

9. Physical and chemical properties

Appearance	Liquid.
Physical state	Liquid.
Form	Liquid.
Colour	Clear colorless or nearly colorless
Odour	Slight.
Odour threshold	Not available.
рН	7 @ 5% solution
Melting point/freezing point	-86.64 °C (-123.95 °F) estimated
Initial boiling point and boiling range	79.59 °C (175.26 °F) estimated

Flash point	204.4 °C (399.9 °F) Closed cup
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	1.8 % estimated
Flammability limit - upper (%)	10 % estimated
Explosive limit - lower (%)	Not available.
Explosive limit – upper (%)	Not available.
Vapour pressure	20.01 hPa estimated
Vapour density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	404 °C (759.2 °F) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	1.01 g/cm3 estimated
Explosive properties	Not explosive.
Flammability class	Combustible IIIB estimated
Oxidising properties	Not oxidising.
Specific gravity	1.01 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	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidising agents. Alcohols. Amines. Ammonia. Caustics. Isocyanates.
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. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Prolonged inhalation may be harmful.
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. Coughing. Difficulty in breathing. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.
Information on toxicological eff	ects
Acute toxicity	Not known.

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ty to humans.		
) 3 Not classifiable as to carcinogenicity to humans.		
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r, this does not exclude the ng effect on the environment.		
dure.		
Partition coefficient n-octanol / water (log Kow) METHYL ETHYL KETONE 0.29 METHYLENE BIS(4-CYCLOHEXYLISOCYANATE) 6.11		

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 considerations		
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	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

TDG

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

Controlled Drugs and Substances Act

the IBC Code

	15.	Regu	latory	infor	mation
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Canadian regulations

This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

es/no)*
Yes
No
Yes
No
No
<i>n</i>

Country(s) or region	Inventory name	On inventory (yes/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

Issue date	22-May-2019
Revision date	30-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 Composition/information on ingredients: Component information Stability and reactivity: Conditions to avoid Toxicological information: Aspiration hazard Toxicological information: Mutagenicity Toxicological information: Reproductivity Toxicological information: Respiratory sensitisation Toxicological information: Ingestion Toxicological information: Skin contact Toxicological information: Specific target organ toxicity - repeated exposure Toxicological information: Specific target organ toxicity - single exposure

SAFETY DATA SHEET

1. Identification				
Product identifier	DEVCON® R-Flex® Hardener			
Other means of identification				
SKU#	6928			
Recommended use	Not available.			
Recommended restrictions	None known.			
Manufacturer/Importer/Supplier				
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	Not classified.			
Health hazards	Acute toxicity, oral	Category 4		
	Serious eye damage/eye irritation	Category 2A		
	Specific target organ toxicity following repeated exposure	Category 2		
Environmental hazards	Not classified.			
Label elements				
Signal word	Warning			
Hazard statement	Harmful if swallowed. Causes serious eye ir prolonged or repeated exposure.	ritation. May cause damage to organs through		
Precautionary statement				
Prevention	Do not breathe mist/vapours. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear eye protection/face protection.			
Response	IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell. Rinse mouth. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention if you feel unwell. If eye irritation persists: Get medical advice/attention.			
Storage	Store away from incompatible materials.			
Disposal	Dispose of contents/container in accordance	e 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	%
Diethyltoluenediamine		68479-98-1	60 - 100
Oleic acid		112-80-1	10 - 30
Carbon Black		1333-86-4	0.1 - 1
Other components below re	portable levels		1 - 5

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

4. First-aid measures	
Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
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. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs Get medical advice/attention if you feel unwell.
Most important symptoms/effects, acute and delayed	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Prolonged exposure may cause chronic effects.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim warm. 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. Show this safety data sheet to the doctor in attendance.
5. Fire-fighting measures	
Suitable extinguishing media	Foam. 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 the chemical	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	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 meas	sures
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. Do not breathe mist/vapours. 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	Use water spray to reduce vapours or divert vapour cloud drift.
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	Do not breathe mist/vapours. Do not taste or swallow. Avoid contact with eyes. When using, do no eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

Material name: DEVCON® R-Flex® Hardener

cupational exposure limits			
US. ACGIH Threshold Limi Components	t Values Type	Value	Form
CARBON BLACK (CAS 1333-86-4)	TWA	3 mg/m3	Inhalable fraction.
Canada. Alberta OELs (Oc Components	cupational Health & Safety Code, Sch Type	nedule 1, Table 2) Value	
CARBON BLACK (CAS 1333-86-4)	TWA	3.5 mg/m3	
Canada. British Columbia Safety Regulation 296/97, a	OELs. (Occupational Exposure Limita as amended)	s for Chemical Substances, (Occupational Health and
Components	Туре	Value	Form
CARBON BLACK (CAS 1333-86-4)	TWA	3 mg/m3	Inhalable
	leg. 217/2006, The Workplace Safety	-	F arma
Components	Туре	Value	Form
CARBON BLACK (CAS 1333-86-4)	TWA	3 mg/m3	Inhalable fraction.
Canada. Ontario OELs. (Co Components	ontrol of Exposure to Biological or Cl Type	nemical Agents) Value	Form
CARBON BLACK (CAS 1333-86-4)	TWA	3 mg/m3	Inhalable fraction.
Canada. Quebec OELs. (M Components	inistry of Labor - Regulation respecti Type	ng occupational health and s Value	safety)
CARBON BLACK (CAS 1333-86-4)	TWA	3.5 mg/m3	
Canada. Saskatchewan OE Components	ELs (Occupational Health and Safety Type	Regulations, 1996, Table 21) Value	
CARBON BLACK (CAS 1333-86-4)	15 minute	7 mg/m3	
	8 hour	3.5 mg/m3	
logical limit values propriate engineering htrols	No biological exposure limits noted f Good general ventilation should be applicable, use process enclosures, maintain airborne levels below recor established, maintain airborne levels	used. Ventilation rates should l local exhaust ventilation, or ot nmended exposure limits. If ex	her engineering controls to posure limits have not been
•	s, such as personal protective equipr		_
Eye/face protection	Chemical respirator with organic var	oour cartriage and full facepiec	е.
Skin protection Hand protection	Wear appropriate chemical resistant	t gloves.	
Other	Wear suitable protective clothing. Us	se of an impervious apron is re	commended.
Respiratory protection	Chemical respirator with organic vap		
Thermal hazards	Wear appropriate thermal protective	clothing, when necessary.	
neral hygiene nsiderations	Keep away from food and drink. Alw washing after handling the material work clothing and protective equipm	and before eating, drinking, an	giene measures, such as d/or smoking. Routinely was
Physical and chemical	properties		
Physical and chemical pearance	Liquid.		
•	• •		

Colour	Black
Odour	Ammoniacal.
Odour threshold	Not available.
рН	7 - 8 @ 5% solution
Melting point/freezing point	16.3 °C (61.34 °F) estimated
Initial boiling point and boiling range	Not available.
Flash point	156.0 °C (312.8 °F) 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.
Vapour pressure	< 1 mm Hg @ 70 F
Vapour density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	362.78 °C (685 °F) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	1.00 g/cm3 estimated
Explosive properties	Not explosive.
Flammability class	Combustible IIIB estimated
Oxidising properties	Not oxidising.
Specific gravity	1 estimated
10 Stability and reactivity	

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	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidising agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Knowledge about health hazard is incomplete.
Skin contact	Knowledge about health hazard is incomplete.
Eye contact	Causes serious eye irritation.
Ingestion	Harmful if swallowed.

physical, chemical and toxicological characteristics

Symptoms related to the

Information on toxicological effects

Acute toxicity Harmful if swallowed.

Acute toxicity	Harmful if swallowed.	
Components	Species	Test Results
Carbon Black (CAS 1333-86-4)		
<u>Acute</u>		
Oral		
LD50	Rat	> 8000 mg/kg
Dleic acid (CAS 112-80-1)		
<u>Acute</u>		
Dermal		
LD50	Guinea pig	> 3000 mg/kg
Oral	_	
LD50	Rat	74 g/kg
Skin corrosion/irritation	Due to partial or compl	ete lack of data the classification is not possible.
Serious eye damage/eye rritation	Causes serious eye irri	itation.
Respiratory or skin sensitisatio	n	
Respiratory sensitisation	Due to partial or compl	ete lack of data the classification is not possible.
Skin sensitisation	Due to partial or compl	ete lack of data the classification is not possible.
Germ cell mutagenicity	Due to partial or compl	ete lack of data the classification is not possible.
Carcinogenicity	Due to partial or compl	ete lack of data the classification is not possible.
ACGIH Carcinogens		
Carbon Black (CAS 133	3-86-4)	A3 Confirmed animal carcinogen with unknown relevance to humans.
Canada - Manitoba OELs: o Carbon Black (CAS 133 IARC Monographs. Overall	3-86-4) Evaluation of Carcinoge	-
Carbon Black (CAS 133 US. National Toxicology Pr	,	2B Possibly carcinogenic to humans.
Carbon Black (CAS 133	• • • •	Known To Be Human Carcinogen.
Reproductive toxicity	•	ete lack of data the classification is not possible.
Specific target organ toxicity - single exposure		ete lack of data the classification is not possible.
Specific target organ toxicity - repeated exposure	May cause damage to	organs through prolonged or repeated exposure.
Aspiration hazard	Due to partial or compl	ete lack of data the classification is not possible.
Chronic effects	May cause damage to	organs through prolonged or repeated exposure.
12. Ecological informatio	n	
Ecotoxicity		sified as environmentally hazardous. However, this does not exclude the 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	No data available.	
Mobility in soil	No data available.	
Other adverse effects		onmental effects (e.g. ozone depletion, photochemical ozone creation sruption, global warming potential) are expected from this component.
13. Disposal consideration	ons	
Disposal instructions	Collect and reclaim or o	dispose in sealed containers at licensed waste disposal site. Dispose of ccordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance	with all applicable regulations.
Material name: DEVCON® R-Flex®	Hardener	SDS CANA

Material name: DEVCON® R-Flex® Hardener

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	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	
TDG	
Not regulated as dangerous g	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

 Canadian regulations
 This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

 Controlled Drugs and Substances Act
 Not regulated.

 Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

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)	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)	Yes
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)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes

Country(s) or region

United States & Puerto Rico

Inventory name

Toxic Substances Control Act (TSCA) Inventory

*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 informat	ion
Issue date	22-May-2019
Revision date	30-April-2020
Version No.	03
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	DEVCON® R-Flex® Surface Conditioner Po	owder Premix
Other means of identification		
SKU#	6934	
Recommended use	Not available.	
Recommended restrictions	None known.	
Manufacturer/Importer/Supplier		
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	Oxidising solids	Category 2
Health hazards	Acute toxicity, oral	Category 4
	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2
	Specific target organ toxicity following single exposure	Category 3 respiratory tract irritation
Environmental hazards	Not classified.	
Label elements		
Signal word	Danger	
Hazard statement	May intensify fire; oxidiser. Harmful if swallowe irritation. May cause respiratory irritation.	ed. Causes skin irritation. Causes serious eye
Precautionary statement		
Prevention	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from clothing and other combustible materials. Avoid breathing dust/fume/gas/mist/vapours/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.	
Response	Wash with plenty of water. IF INHALED: Remo breathing. IF IN EYES: Rinse cautiously with v present and easy to do. Continue rinsing. Call skin irritation occurs: Get medical advice/atter advice/attention. Take off contaminated clothin appropriate media to extinguish.	ng and wash it before reuse. In case of fire: Use
Storage	Store in a well-ventilated place. Keep contained	er tightly closed. Store locked up.

Discost	Dianaaa of aantanta/aantainay in aaaaydanaa		
Disposal Other harmeda	Dispose of contents/container in accordance	e with local/regional/national/int	ernational regulations.
Other hazards	None known.		
Supplemental information	None.		
3. Composition/information	on on ingredients		
Mixtures			
Chemical name	Common name and synonyms	CAS number	%
TRICHLOROISOCYANURIC A	CID	87-90-1	60 - 100
Other components below report	table levels		15 - 40
All concentrations are in percent b	by weight unless ingredient is a gas. Gas conc	entrations are in percent by volu	ume.
4. First-aid measures			
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison centre or doctor/physician if you feel unwell.		
Skin contact	If on clothing: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. 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. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs Get medical advice/attention if you feel unwell.		
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.		
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and tr under observation. Symptoms may be delay		m warm. Keep victim
General information	Take off all contaminated clothing immediate If you feel unwell, seek medical advice (show personnel are aware of the material(s) invol- this safety data sheet to the doctor in attend	w the label where possible). En ved, and take precautions to pre-	sure that medical otect themselves. Show
5. Fire-fighting measures			
Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Ca	rbon dioxide (CO2).	
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as t	this will spread the fire.	

Illeula	
Specific hazards arising from the chemical	Greatly increases the burning rate of combustible materials. Containers may explode when heated. 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 on so without risk. Use water spray to cool unopened containers.
Specific methods	Cool containers exposed to flames with water until well after the fire is out.
General fire hazards	May intensify fire; oxidiser. Contact with combustible material may cause fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep away from clothing and other combustible materials. Wear appropriate protective equipment and clothing during clean-up. 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.

do

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. Ventilate the contaminated area. Minimise dust generation and accumulation. Wear appropriate protective equipment and clothing during clean-up. This product is miscible in water. Stop the flow of material, if this is without risk.
	Large Spills: Wet down with water and dike for later disposal. Absorb in vermiculite, dry sand or earth and place into containers. Shovel the material into waste container. Following product recovery, flush area with water.
	Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. 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	Minimise dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Keep away from heat. Take any precaution to avoid mixing with combustibles. Keep away from clothing and other combustible materials. Do not taste or swallow. Avoid contact with eyes, skin, and clothing. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store locked up. Keep away from heat. Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Store in a well-ventilated place. Do not store near combustible materials. Store away from incompatible materials (see Section 10 of the SDS).
8. Exposure controls/pers	onal protection
Occupational exposure limits	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	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.
Individual protection measures, Eye/face protection	such as personal protective equipment Wear safety glasses with side shields (or goggles). Face shield is recommended.
Skin protection	
Hand protection	Wear appropriate chemical resistant gloves. Frequent change is advisable.
Other	Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. Chemical respirator with organic vapour cartridge.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Keep from contact with clothing and other combustible materials. Remove and wash contaminated clothing promptly. Keep away from food and drink. 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.
9. Physical and chemical	properties
Appearance	Solid.
Physical state	Solid.
Form	Solid.
Colour	Amber.
Odour	Slight. Chlorine.
Odour threshold	Not available.
рН	Not available.
Melting point/freezing point	246 °C (474.8 °F) estimated
Initial boiling point and boiling	Not available.

range

Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
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.
Vapour pressure	0.00001 hPa estimated
Vapour density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	1.2 % @ 25 C
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	1.16 - 1.90 g/cm3
Explosive properties	Not explosive.
Oxidising properties	May intensify fire; oxidiser.
Specific gravity	1.16 - 1.9
10 Stability and reactivity	

10. Stability and reactivity

-	•
Reactivity	Greatly increases the burning rate of combustible materials.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Heat. Contact with incompatible materials.
Incompatible materials	Combustible material. Reducing Agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure Inholodi . . irritatio

Inhalation	May cause irritation to the respiratory system.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.
Ingestion	Harmful if swallowed.
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.
Information on toxicological ef	fects
Acute toxicity	In high concentrations, vapours are anaesthetic and may cause headache, fatigue, dizziness and

Acute toxicity	central nervous system effects. I	Harmful if swallowed.
Components	Species	Test Results
TRICHLOROISOCYANUF	RIC ACID (CAS 87-90-1)	
Acute		
Dermal		
LD50	Rabbit	20000 mg/kg

Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/eye irritation	Causes serious eye irritation.
Respiratory or skin sensitisation	1
Respiratory sensitisation	Due to partial or complete lack of data the classification is not possible.
Skin sensitisation	Due to partial or complete lack of data the classification is not possible.
Germ cell mutagenicity	Due to partial or complete lack of data the classification is not possible.
Carcinogenicity	Due to partial or complete lack of data the classification is not possible.
Reproductive toxicity	Due to partial or complete lack 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.
12. Ecological information	۱
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	No data available.
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	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

TDG

Not regulated as dangerous goods.

ΙΑΤΑ

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

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

15. Regulatory information

Canadian regulations

This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Controlled Drugs and Substances Act

Not regulated. Export Control List (CEPA 1999, Schedule 3) Not listed. Greenhouse Gases Not listed.

Not regulated.		
rnational regulations		
Stockholm Convention		
Not applicable. Rotterdam Convention		
Not applicable. Kyoto Protocol		
Not applicable. Montreal Protocol		
Not applicable. Basel Convention		
Not applicable.		
rnational Inventories		
Country(s) or region	Inventory name	On inventory (yes/no
Australia	Australian Inventory of Chemical Substances (AICS)	Y
Canada	Domestic Substances List (DSL)	Y
Canada	Non-Domestic Substances List (NDSL)	1
China	Inventory of Existing Chemical Substances in China (IECSC)	Y
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Y
Europe	European List of Notified Chemical Substances (ELINCS)	1
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Y
Korea	Existing Chemicals List (ECL)	Y
New Zealand	New Zealand Inventory	Y
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Y
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Y
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Y

*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	
Issue date	23-May-2019
Revision date	05-May-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 information Stability and reactivity: Conditions to avoid Toxicological information: Aspiration hazard Toxicological information: Carcinogenicity Toxicological information: Corrosivity Toxicological information: Mutagenicity Toxicological information: Reproductivity Toxicological information: Respiratory sensitisation Toxicological information: Inhalation Toxicological information: Skin contact Toxicological information: Specific target organ toxicity - repeated exposure Toxicological information: Specific target organ toxicity - single exposure

SAFETY DATA SHEET

Product identifier	DEVCON® R-Flex® Surface Conditioner	
Other means of identification		
SKU#	6936	
Recommended use	Not available.	
Recommended restrictions	None known.	
Manufacturer/Importer/Supplie	r/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	Serious eye damage/eye irritation	Category 2A
	Specific target organ toxicity following single	Category 3 narcotic effects
	exposure	
Environmental hazards	Not classified.	
Environmental hazards Label elements	-	
	-	
	-	
Label elements	Not classified.	serious eye irritation. May cause drowsiness or
Label elements Signal word	Not classified.	serious eye irritation. May cause drowsiness or
Label elements Signal word Hazard statement	Not classified.	pen flames and other ignition sources. No smoking. nd container and receiving equipment. Use quipment. Use non-sparking tools. Take action to
Label elements Signal word Hazard statement Precautionary statement	Not classified. Not classified. Not classified. Not classified. Danger Highly flammable liquid and vapour. Causes and dizziness. Keep away from heat, hot surfaces, sparks, on Keep container tightly closed. Ground and bon explosion-proof electrical/ventilating/lighting e prevent static discharges. Wash thoroughly and well-ventilated area. Wear protective gloves/p IF ON SKIN (or hair): Take off immediately all INHALED: Remove person to fresh air and ke cautiously with water for several minutes. Rem	pen flames and other ignition sources. No smoking. nd container and receiving equipment. Use quipment. Use non-sparking tools. Take action to fter handling. Use only outdoors or in a rotective clothing/eye protection/face protection. contaminated clothing. Rinse skin with water. IF tep comfortable for breathing. IF IN EYES: Rinse nove contact lenses, if present and easy to do. totor if you feel unwell. If eye irritation persists: Get
Label elements Signal word Hazard statement Precautionary statement Prevention	Not classified. Not cl	pen flames and other ignition sources. No smoking. nd container and receiving equipment. Use quipment. Use non-sparking tools. Take action to fter handling. Use only outdoors or in a protective clothing/eye protection/face protection. contaminated clothing. Rinse skin with water. IF eep comfortable for breathing. IF IN EYES: Rinse nove contact lenses, if present and easy to do. totor if you feel unwell. If eye irritation persists: Get appropriate media to extinguish.
Label elements Signal word Hazard statement Precautionary statement Prevention Response	Not classified. Not cl	pen flames and other ignition sources. No smoking. nd container and receiving equipment. Use quipment. Use non-sparking tools. Take action to fter handling. Use only outdoors or in a protective clothing/eye protection/face protection. contaminated clothing. Rinse skin with water. IF eep comfortable for breathing. IF IN EYES: Rinse nove contact lenses, if present and easy to do. totor if you feel unwell. If eye irritation persists: Get appropriate media to extinguish.
Label elements Signal word Hazard statement Precautionary statement Prevention Response Storage	Not classified. Not cl	pen flames and other ignition sources. No smoking. nd container and receiving equipment. Use quipment. Use non-sparking tools. Take action to fter handling. Use only outdoors or in a rotective clothing/eye protection/face protection. contaminated clothing. Rinse skin with water. IF eep comfortable for breathing. IF IN EYES: Rinse nove contact lenses, if present and easy to do. cctor if you feel unwell. If eye irritation persists: Get appropriate media to extinguish. eep container tightly closed. Store locked up.

Mixtures			
Chemical name	Common name and synonyms	CAS number	%
ACETONE		67-64-1	100
All concentrations are in percent b	y weight unless ingredient is a gas. Gas conce	entrations are in percent by volume	9.
4. First-aid measures	,	,,, _,, _	
	B		·
Inhalation	Remove victim to fresh air and keep at rest i centre or doctor/physician if you feel unwell.		
Skin contact	Take off immediately all contaminated clothin attention if irritation develops and persists.	ng. Rinse skin with water/shower.	Get medical
Eye contact	Immediately flush eyes with plenty of water f present and easy to do. Continue rinsing. Get		
Ingestion	Rinse mouth. Get medical attention if sympton	oms occur.	
Most important symptoms/effects, acute and delayed	May cause drowsiness and dizziness. Heada Symptoms may include stinging, tearing, rec		
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and tre immediately. While flushing, remove clothes ambulance. Continue flushing during transpo Symptoms may be delayed.	which do not adhere to affected a	rea. Call an
General information	Take off all contaminated clothing immediate material(s) involved, and take precautions to before reuse.		
5. Fire-fighting measures			
Suitable extinguishing media	Water fog. Alcohol resistant foam. Carbon d sand or earth may be used for small fires on		r, carbon dioxide,
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as t	his will spread the fire.	
Specific hazards arising from the chemical	Vapours may form explosive mixtures with a source of ignition and flash back. This produ electrostatically charged. If sufficient charge occur. To reduce potential for static discharg This liquid may accumulate static electricity electricity accumulation may be significantly or other contaminants. Material will float and hazardous to health may be formed.	ct is a poor conductor of electricity is accumulated, ignition of flamma le, use proper bonding and ground when filling properly grounded con increased by the presence of sma	r and can become able mixtures can ling procedures. tainers. Static Il quantities of wate
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 breath so without risk.	ne fumes. Move containers from fir	e area if you can d
Specific methods	Use standard firefighting procedures and co	nsider the hazards of other involve	d materials.
General fire hazards	Highly flammable liquid and vapour.		
6. Accidental release mea	sures		
Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep per ignition sources (no smoking, flares, sparks, protective equipment and clothing during cle damaged containers or spilled material unless	or flames in immediate area). We an-up. Avoid breathing mist/vapou	ar appropriate Irs. Do not touch

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.
Environmental precautions	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. 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. Avoid breathing mist/vapours. Avoid contact with eyes. 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/pers	onal protection

8. Exposure controls/personal protection

Components	Туре	Value
ACETONE (CAS 67-64-1)	STEL	500 ppm
	TWA	250 ppm
Canada, Alberta OELs (Occupatio	nal Health & Safety Code, Sci	nedule 1. Table 2)
	nal Health & Safety Code, Sc Type	nedule 1, Table 2) Value
Components	-	
Components	Туре	Value
Canada. Alberta OELs (Occupatio Components ACETONE (CAS 67-64-1)	Туре	Value 1800 mg/m3

ŀ Safety Regulation 296/97, as amended)

Components	Туре	Value
ACETONE (CAS 67-64-1)	STEL	500 ppm
	TWA	250 ppm

Canada. Manitoba OELs (Re Components	eg. 217/2006, T	he Workplace Safety A Type		lue
ACETONE (CAS 67-64-1)		STEL	50	0 ppm
		TWA	25	0 ppm
Canada. Ontario OELs. (Cor Components	ntrol of Exposi	ure to Biological or Che Type		alue
ACETONE (CAS 67-64-1)		STEL	50	0 ppm
		TWA	25	i0 ppm
Canada. Quebec OELs. (Mir Components	nistry of Labor	- Regulation respectin Type	• •	health and safety) Nue
ACETONE (CAS 67-64-1)		STEL	23	80 mg/m3
			10	00 ppm
		TWA	11	90 mg/m3
			50	10 ppm
Canada. Saskatchewan OEI Components	_s (Occupatior	nal Health and Safety R Type	•	6, Table 21) Alue
ACETONE (CAS 67-64-1)		15 minute	75	0 ppm
		8 hour	50	0 ppm
Biological limit values ACGIH Biological Exposure Components V	Indices alue	Determinant	Specimen	Sampling Time
ACETONE (CAS 67-64-1) 2	5 mg/l	Acetone	Urine	*
* - For sampling details, pleas	e see the source	ce document.		
Appropriate engineering controls	Ventilation ra exhaust venti exposure limi	tes should be matched t lation, or other engineer	o conditions. If a ing controls to m e not been estat	Good general ventilation should be used. pplicable, use process enclosures, local aintain airborne levels below recommended blished, maintain airborne levels to an shower.
Individual protection measures,	•	•	-	
Eye/face protection	-	pirator with organic vapo		full facepiece.
Skin protection Hand protection	Wear approp	riate chemical resistant (gloves.	
Other	Wear suitable	e protective clothing.		
Respiratory protection	Chemical res	pirator with organic vapo	our cartridge and	full facepiece.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.			
General hygiene considerations	Wear appropriate thermal protective counting, when necessary. When using do not smoke. 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.			
9. Physical and chemical	properties			
Appearance	Liquid.			
Physical state	Liquid.			
Form	Liquid.			
Colour	Nearly colorle	ess		
Odour	Fruity.			
Odour threshold	Not available.			
рН	Not available.			
Melting point/freezing point		3.46 °F) estimated		
Initial boiling point and boiling range		2.89 °F) estimated		

Evaporation rate	Not available.	
Flammability (solid, gas)	Not applicable.	
Upper/lower flammability or explosive limits		
Flammability limit - lower (%)	2.6 % estimated	
Flammability limit - upper (%)	12.8 % estimated	
Explosive limit - lower (%)	Not available.	
Explosive limit – upper (%)	Not available.	
Vapour pressure	309.3 hPa estimated	
Vapour density	Not available.	
Relative density	Not available.	
Solubility(ies)		
Solubility (water)	Not available.	
Partition coefficient (n-octanol/water)	Not available.	
Auto-ignition temperature	465 °C (869 °F) estimated	
Decomposition temperature	Not available.	
Viscosity	Not available.	
Other information		
Density	0.79 g/cm3 estimated	
Explosive properties	Not explosive.	
Flammability class	Flammable IB estimated	
Oxidising properties	Not oxidising.	
Percent volatile	100 % estimated	
Specific gravity	0.79 estimated	
VOC	100 % estimated	
10 Ctability and reactivity		

10. Stability and reactivity

The product is stable and non-reactive under normal conditions of use, storage and transport.
Material is stable under normal conditions.
Hazardous polymerisation does not occur.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Acids. Strong oxidising agents.
No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure Inhalation May cause drowsiness and dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be harmful. Skin contact No adverse effects due to skin contact are expected. Eye contact Causes serious eye irritation. Ingestion Expected to be a low ingestion hazard. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms related to the physical, chemical and Symptoms may include stinging, tearing, redness, swelling, and blurred vision. toxicological characteristics Information on toxicological effects

Acute toxicity

ACETONE (CAS 67-64-1)			
Acute			
Dermal			
LD50	Rabbit	20000 mg/kg	
Inhalation			
LC50	Rat	50.1 mg/l, 8 Hours	
Oral			
LD50	Rat	5800 mg/kg	
Skin corrosion/irritation	Prolonged skin contact may	cause temporary irritation.	
Serious eye damage/eye irritation	Causes serious eye irritation		
Respiratory or skin sensitisation	ı		
Respiratory sensitisation	Not a respiratory sensitizer.		
Skin sensitisation	This product is not expected	to cause skin sensitisation.	
Germ cell mutagenicity	No data available to indicate mutagenic or genotoxic.	product or any components present at greater than 0.1% are	
Carcinogenicity			
ACGIH Carcinogens			
ACETONE (CAS 67-64-1		A4 Not classifiable as a human carcinogen.	
Canada - Manitoba OELs: ca	v ,		
ACETONE (CAS 67-64-1	,	Not classifiable as a human carcinogen.	
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.		
Specific target organ toxicity - single exposure	May cause drowsiness and dizziness.		
Specific target organ toxicity - repeated exposure	Not classified.		
Aspiration hazard	Not an aspiration hazard.		
Chronic effects	Prolonged inhalation may be harmful.		
12. Ecological information	า		
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 ACETONE	ol / water (log Kow)	-0.24	
Mobility in soil	No data available.		
Other adverse effects	The product contains volatile potential.	organic compounds which have a photochemical ozone creation	
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	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	product residues. This mater 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:	
Contaminated packaging		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

TDG	
UN number	UN1090
UN proper shipping name	Acetone "Dangerous goods in excepted quantities"
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	ll
Environmental hazards	Not available.
Special precautions for use	r Read safety instructions, SDS and emergency procedures before handling.
ΙΑΤΑ	
UN number	UN1090
UN proper shipping name	Acetone "Dangerous goods in excepted quantities"
Transport hazard class(es)	
Class	3
Subsidiary risk	
Packing group	ll
Environmental hazards	No.
ERG Code	3H
· ·	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	UN1090
UN proper shipping name	Acetone "Dangerous goods in excepted quantities"
Transport hazard class(es)	_
Class	3
Subsidiary risk	-
Packing group	II
Environmental hazards	
Marine pollutant	No.
EmS	F-E, S-D
Transport in bulk according to	r Read safety instructions, SDS and emergency procedures before handling. Not established.
Annex II of MARPOL 73/78 and	ואטו בשומטוושוובט.
the IBC Code	

IATA; IMDG; TDG



15. Regulatory information

Canadian regulations

This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Canada. Excluded VOCs. Guidelines for Volatile Organic Compounds in Consumer Products. CEPA 1999. Environment Canada, as amended

ACETONE (CAS 67-64-1) Controlled Drugs and Substances Act Not regulated. Export Control List (CEPA 1999, Schedule 3)

Not listed.

Not listed.		
Ontario. Toxic Substances.	Toxic Reduction Act, 2009. Regulation 455/09 (July 1, 2011)	
ACETONE (CAS 67-64-1	,	
Precursor Control Regulation		
ACETONE (CAS 67-64-1) Class B	
ernational regulations		
Stockholm Convention		
Not applicable. Rotterdam Convention		
Not applicable. Kyoto Protocol		
Not applicable. Montreal Protocol		
Not applicable. Basel Convention		
Not applicable.		
ernational Inventories		
Country(s) or region	Inventory name	On inventory (yes/r
Australia	Australian Inventory of Chemical Substances (AICS)	
Canada	Domestic Substances List (DSL)	
Canada	Non-Domestic Substances List (NDSL)	
China	Inventory of Existing Chemical Substances in China (IECSC)	
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	·
Europe	European List of Notified Chemical Substances (ELINCS)	
Japan	Inventory of Existing and New Chemical Substances (ENCS)	
Korea	Existing Chemicals List (ECL)	
New Zealand	New Zealand Inventory	
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	

*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

Issue date	23-May-2019
Version No.	01
Disclaimer	ITW Performance Poly product, or the product the user's responsibilit product, and to assum information provided in

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	Devcon Flexane Primer FL-10			
Other means of identification				
SKU#	6929			
Recommended use	Not available.	Not available.		
Recommended restrictions	None known.			
Manufacturer/Importer/Supplie	er/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, oral	Category 4		
	Acute toxicity, inhalation	Category 4		
	Skin corrosion/irritation	Category 2		
	Serious eye damage/eye irritation	Category 2A		
	Carcinogenicity	Category 2		
	Reproductive toxicity	Category 2		
	Specific target organ toxicity following single exposure	Category 3 respiratory tract irritation		
	Specific target organ toxicity following single exposure	Category 3 narcotic effects		
	Specific target organ toxicity following repeated exposure	Category 2		
	Aspiration hazard	Category 1		
Environmental hazards	Not classified.			
Label elements				
	$\land \land \land$			

Signal word Hazard statement Danger

Highly flammable liquid and vapour. Harmful if swallowed. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. Harmful if inhaled. May cause respiratory irritation. May cause drowsiness or dizziness. Suspected of causing cancer. Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure.

Precautionary statement	
Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Do not breathe mist/vapours. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.
Response	IF SWALLOWED: Immediately call a POISON CENTRE/doctor. Rinse mouth. Do NOT induce vomiting. 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. IF exposed or concerned: Get medical advice/attention. If skin irritation 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	%
ISOPROPANOL		67-63-0	15 - 40
METHYL ISOBUTYL KETONE		108-10-1	15 - 40
TOLUENE		108-88-3	15 - 40
ETHANOL		64-17-5	1 - 5
METHYL ALCOHOL		67-56-1	0.1 - 1
Other components below reportable	levels		0.1 - 1

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	Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. 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	Call a physician or poison control centre immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
Most important symptoms/effects, acute and delayed	Aspiration may cause pulmonary oedema and pneumonitis. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain. Prolonged exposure may cause chronic effects.
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 exposed or concerned: Get medical advice/attention. 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. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.
5. Fire-fighting measures	

Suitable extinguishing media	Water fog. Alcohol resistant for
------------------------------	----------------------------------

Water fog. Alcohol resistant 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	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 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 mea	sures
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. Do not breathe 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. Put material in suitable, covered, labeled containers. 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	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. 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 breathe mist/vapours. Do not taste or swallow. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. 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".

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

Components	Туре	Value	
ETHANOL (CAS 64-17-5)	STEL	1000 ppm	
ISOPROPANOL (CAS 67-63-0)	STEL	400 ppm	
	TWA	200 ppm	
METHYL ALCOHOL (CAS 67-56-1)	STEL	250 ppm	
	TWA	200 ppm	
METHYL ISOBUTYL KETONE (CAS 108-10-1)	STEL	75 ppm	
	TWA	20 ppm	
TOLUENE (CAS 108-88-3)	TWA	20 ppm	

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

Components	Туре	Value	
ETHANOL (CAS 64-17-5)	TWA	1880 mg/m3	
		1000 ppm	
ISOPROPANOL (CAS 67-63-0)	STEL	984 mg/m3	
		400 ppm	
	TWA	492 mg/m3	
		200 ppm	
METHYL ALCOHOL (CAS 67-56-1)	STEL	328 mg/m3	
		250 ppm	
	TWA	262 mg/m3	
		200 ppm	
METHYL ISOBUTYL KETONE (CAS 108-10-1)	STEL	307 mg/m3	
		75 ppm	
	TWA	205 mg/m3	
		50 ppm	
TOLUENE (CAS 108-88-3)	TWA	188 mg/m3	
		50 ppm	

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

Components	Туре	Value	
ETHANOL (CAS 64-17-5)	STEL	1000 ppm	
ISOPROPANOL (CAS 67-63-0)	STEL	400 ppm	
	TWA	200 ppm	
METHYL ALCOHOL (CAS 67-56-1)	STEL	250 ppm	
	TWA	200 ppm	

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

Components	Туре	Value	
METHYL ISOBUTYL KETONE (CAS 108-10-1)	STEL	75 ppm	
	TWA	20 ppm	
TOLUENE (CAS 108-88-3)	TWA	20 ppm	

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

Components	Туре	Value
ETHANOL (CAS 64-17-5)	STEL	1000 ppm
ISOPROPANOL (CAS 67-63-0)	STEL	400 ppm
	TWA	200 ppm
METHYL ALCOHOL (CAS 67-56-1)	STEL	250 ppm
	TWA	200 ppm
METHYL ISOBUTYL KETONE (CAS 108-10-1)	STEL	75 ppm
	TWA	20 ppm
TOLUENE (CAS 108-88-3)	TWA	20 ppm

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

Components	Туре	Value
ETHANOL (CAS 64-17-5)	STEL	1000 ppm
ISOPROPANOL (CAS 67-63-0)	STEL	400 ppm
	TWA	200 ppm
METHYL ALCOHOL (CAS 67-56-1)	STEL	250 ppm
	TWA	200 ppm
METHYL ISOBUTYL KETONE (CAS 108-10-1)	STEL	75 ppm
	TWA	20 ppm
TOLUENE (CAS 108-88-3)	TWA	20 ppm

Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety)

Components	Туре	Value	
ETHANOL (CAS 64-17-5)	TWA	1880 mg/m3	
		1000 ppm	
ISOPROPANOL (CAS 67-63-0)	STEL	1230 mg/m3	
		500 ppm	
	TWA	983 mg/m3	
		400 ppm	
METHYL ALCOHOL (CAS 67-56-1)	STEL	328 mg/m3	
		250 ppm	
	TWA	262 mg/m3	
		200 ppm	
METHYL ISOBUTYL KETONE (CAS 108-10-1)	STEL	307 mg/m3	
		75 ppm	
	TWA	205 mg/m3	
		50 ppm	

Canada. Quebec OELs. (Ministry o Components	f Labor - Regulation respecting Type	g occupational health and safety) Value	
TOLUENE (CAS 108-88-3)	TWA	188 mg/m3	
		50 ppm	
Canada. Saskatchewan OELs (Oco Components	cupational Health and Safety Re Type	egulations, 1996, Table 21) Value	
ETHANOL (CAS 64-17-5)	15 minute	1250 ppm	
	8 hour	1000 ppm	
ISOPROPANOL (CAS 67-63-0)	15 minute	400 ppm	
	8 hour	200 ppm	
METHYL ALCOHOL (CAS 67-56-1)	15 minute	250 ppm	
	8 hour	200 ppm	
METHYL ISOBUTYL KETONE (CAS 108-10-1)	15 minute	75 ppm	
	8 hour	50 ppm	
TOLUENE (CAS 108-88-3)	15 minute	60 ppm	
	8 hour	50 ppm	

Biological limit values

ACGIH Biological Exposu Components	Value	Determinant	Specimen	Sampling Time
ISOPROPANOL (CAS 67-63-0)	40 mg/l	Acetone	Urine	*
METHYL ALCOHOL (CAS 67-56-1)	15 mg/l	Methanol	Urine	*
METHYL ISOBUTYL KETONE (CAS 108-10-1)	1 mg/l	Methyl isobutyl ketone	Urine	*
TOLUENE (CAS 108-88-3)	0.3 mg/g	o-Cresol, with hydrolysis	Creatinine in urine	*
	0.03 mg/l	Toluene	Urine	*
	0.02 mg/l	Toluene	Blood	*

* - For sampling details, please see the source document.

Exposure guidelines

p 3	
Canada - Alberta OELs: Skin designation	
METHYL ALCOHOL (CAS 67-56-1)	Can be absorbed through the skin.
TOLUENE (CAS 108-88-3)	Can be absorbed through the skin.
Canada - British Columbia OELs: Skin designation	
METHYL ALCOHOL (CAS 67-56-1)	Can be absorbed through the skin.
Canada - Manitoba OELs: Skin designation	
METHYL ALCOHOL (CAS 67-56-1)	Can be absorbed through the skin.
Canada - Ontario OELs: Skin designation	
METHYL ALCOHOL (CAS 67-56-1)	Can be absorbed through the skin.
Canada - Quebec OELs: Skin designation	
METHYL ALCOHOL (CAS 67-56-1)	Can be absorbed through the skin.
TOLUENE (CAS 108-88-3)	Can be absorbed through the skin.
Canada - Saskatchewan OELs: Skin designation	
METHYL ALCOHOL (CAS 67-56-1)	Can be absorbed through the skin.
TOLUENE (CAS 108-88-3)	Can be absorbed through the skin.
US ACGIH Threshold Limit Values: Skin designation	
METHYL ALCOHOL (CAS 67-56-1)	Can be absorbed through the skin.

Appropriate engineering controls	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 recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station and safety shower.
Individual protection measures,	such as personal protective equipment
Eye/face protection	Chemical respirator with organic vapour cartridge and full facepiece.
Skin protection	
Hand protection	Wear appropriate chemical resistant gloves.
Other	Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.
Respiratory protection	Chemical respirator with organic vapour cartridge and full facepiece.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Observe any medical surveillance requirements. When using do not smoke. Keep away from food and drink. 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.

9. Physical and chemical properties

5. Thysical and chemical	properties
Appearance	Liquid.
Physical state	Liquid.
Form	Liquid.
Colour	Blue.
Odour	Solvent.
Odour threshold	Not available.
рН	Not available.
Melting point/freezing point	-94.9 °C (-138.82 °F) estimated
Initial boiling point and boiling range	82.5 °C (180.5 °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	losive limits
Flammability limit - lower (%)	1.3 % estimated
Flammability limit - upper (%)	12 % estimated
Explosive limit - lower (%)	Not available.
Explosive limit – upper (%)	Not available.
Vapour pressure	40.87 hPa estimated
Vapour density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	399 °C (750.2 °F) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	0.87 g/cm3 estimated
Explosive properties	Not explosive.
Flammability class	Flammable IB estimated

Oxidising properties Percent volatile	ile 80 %	
Specific gravity		
VOC	640 g/l	
10. Stability and reactiv	ity	
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	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.	
Incompatible materials	Acids. Strong oxidising agents. Chlorine. Isocyanates.	
Hazardous decomposition	No hazardous decomposition products are known.	

11. Toxicological information

products

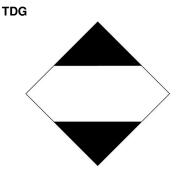
Information on likely routes of exposure		
Inhalation	Harmful if inhaled. May cause drowsiness and dizziness. Headache. Nausea, vomiting.	
Skin contact	Causes skin irritation.	
Eye contact	Causes serious eye irritation.	
Ingestion	Harmful if swallowed. Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.	
Symptoms related to the physical, chemical and toxicological characteristics	Aspiration may cause pulmonary oedema and pneumonitis. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain.	

Information on toxicological effects

Acute toxicity	May be fatal if swallowed	May be fatal if swallowed and enters airways. Harmful if inhaled.	
Components	Species	Test Results	
ETHANOL (CAS 64-17-5)			
Acute			
Inhalation			
LC50	Mouse	39 mg/l, 4 Hours	
Oral			
LD50	Rat	6.2 g/kg	
ISOPROPANOL (CAS 67-6	3-0)		
Acute			
Dermal			
LD50	Rabbit	12800 mg/kg	
Oral			
LD50	Rat	4.7 g/kg	
METHYL ALCOHOL (CAS	67-56-1)		
Acute			
Dermal			
LD50	Rabbit	15800 mg/kg	
METHYL ISOBUTYL KETO	NE (CAS 108-10-1)		
Acute			
Dermal			
LD50	Rabbit	> 16000 mg/kg	
Inhalation			
LC50	Rat	8.2 mg/l, 4 Hours	

Components	Species	Test Results
TOLUENE (CAS 108-88-3)		
Acute		
Dermal		
LD50	Rabbit	12120 mg/kg
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/eye irritation	Causes serious eye irritatior	ו.
Respiratory or skin sensitisation		
Respiratory sensitisation		ack of data the classification is not possible.
Skin sensitisation		ack of data the classification is not possible.
Germ cell mutagenicity	Due to partial or complete la	ack of data the classification is not possible.
Carcinogenicity	Suspected of causing cance	er.
ACGIH Carcinogens		
ISOPROPANOL (CAS 67 METHYL ISOBUTYL KET		A4 Not classifiable as a human carcinogen. A3 Confirmed animal carcinogen with unknown relevance to humans.
TOLUENE (CAS 108-88- Canada - Manitoba OELs: ca		A4 Not classifiable as a human carcinogen.
ETHANOL (CAS 64-17-5 ISOPROPANOL (CAS 67 METHYL ISOBUTYL KET TOLUENE (CAS 108-88-	, -63-0) FONE (CAS 108-10-1)	Confirmed animal carcinogen with unknown relevance to humans. Not classifiable as a human carcinogen. Confirmed animal carcinogen with unknown relevance to humans. Not classifiable as a human carcinogen.
	Evaluation of Carcinogenicit	
METHYL ISOBUTYL KET TOLUENE (CAS 108-88-		2B Possibly carcinogenic to humans. 3 Not classifiable as to carcinogenicity to humans.
Reproductive toxicity	Suspected of damaging fert	ility or the unborn child.
Specific target organ toxicity - single exposure	May cause respiratory irritat	ion. May cause drowsiness and dizziness.
Specific target organ toxicity - repeated exposure	May cause damage to orgar	ns through prolonged or repeated exposure.
Aspiration hazard	May be fatal if swallowed an	d enters airways.
Chronic effects		e harmful. May cause damage to organs through prolonged or ed exposure may cause chronic effects.
12. Ecological information	n	
Ecotoxicity		as environmentally hazardous. However, this does not exclude the lent spills can have a harmful or damaging effect on the environment.
Persistence and degradability	No data is available on the o	degradability of any ingredients in the mixture.
Bioaccumulative potential		
Partition coefficient n-octan ETHANOL ISOPROPANOL METHYL ALCOHOL METHYL ISOBUTYL KETONI TOLUENE		-0.31 0.05 -0.77 1.31 2.73
Mobility in soil	No data available.	
Other adverse effects	The product contains volatile potential.	e organic compounds which have a photochemical ozone creation
13. Disposal consideratio	ns	
Disposal instructions		se in sealed containers at licensed waste disposal site. Dispose of lance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with	
Hazardous waste code	The waste code should be a disposal company.	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	
TDG	
UN number	UN1993
UN proper shipping name	FLAMMABLE LIQUID, N.O.S. (Toluene, METHYL ISOBUTYL KETONE), Limited Quantity
Transport hazard class(es)	T EXMINABLE EIGOID, N.O.O. (Toldene, METTTE IOODOTTE RETONE), Elinited Quantity
Class	3
Subsidiary risk	-
Packing group	П
Environmental hazards	Not available.
	Read safety instructions, SDS and emergency procedures before handling.
ΙΑΤΑ	
UN number	UN1993
UN proper shipping name	Flammable liquid, n.o.s. (Toluene, METHYL ISOBUTYL KETONE)
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	II
Environmental hazards	No.
ERG Code	3H
Special precautions for user Other information	Read safety instructions, SDS and emergency procedures before handling.
Passenger and cargo aircraft	Allowed with restrictions.
Cargo aircraft only	Allowed with restrictions.
Can ship as Excepted Quantity	1
IMDG	
UN number	
UN proper shipping name	FLAMMABLE LIQUID, N.O.S. (Toluene, METHYL ISOBUTYL KETONE)
Transport hazard class(es) Class	0
Subsidiary risk	3
Packing group	
Environmental hazards	
Marine pollutant	No.
EmS	F-E, <u>S</u> - <u>E</u>
_	Read safety instructions, SDS and emergency procedures before handling.
Can ship as Excepted Quantity	
Transport in bulk according to	Not established.
Annex II of MARPOL 73/78 and	
the IBC Code	
IATA; IMDG	



15. Regulatory information

Canadian regulations

This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Controlled Drugs and Substances Act

Not regulated. Export Control List (CEPA 1999, Schedule 3) Not listed. **Greenhouse Gases**

Not listed.

Ontario. Toxic Substances. Toxic Reduction Act, 2009. Regulation 455/09 (July 1, 2011)

METHYL ALCOHOL (CAS 67-56-1) **TOLUENE (CAS 108-88-3)**

Precursor Control Regulations

TOLUENE (CAS 108-88-3)

International regulations

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable. **Kvoto Protocol**

Not applicable. **Montreal Protocol**

Not applicable.

Basel Convention

Not applicable.

International Inventories

Country(s) or region	Inventory name On invento	ory (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)	Yes
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)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

Class B

*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	
Issue date	23-May-2019
Revision date	08-June-2020
Version No.	03
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	Transport Information: Proper Shipping Name/Packing Group