SAFETY DATA SHEET

1. Identification				
Product identifier	PDR 6000			
Other means of identification				
SKU#	103108			
Recommended use	Not available.			
Recommended restrictions	None known.	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 3		
Health hazards	Acute toxicity, oral	Category 4		
	Skin corrosion/irritation	Category 2		
	Serious eye damage/eye irritation	Category 2A		
	Sensitization, skin	Category 1		
	Germ cell mutagenicity	Category 1B		
	Carcinogenicity	Category 1		
	Reproductive toxicity	Category 2		
	Specific target organ toxicity following repeated exposure	Category 1		
	Aspiration hazard	Category 1		
Environmental hazards	Not classified.			
Label elements				
Signal word	Danger			
Hazard statement	Flammable liquid and vapour. Harmful if swallowed. May be fatal if swallowed and enters airways. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause genetic defects. May cause cancer. Suspected of damaging fertility or the unborn child. Causes 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. Contaminated work clothing should not be allowed out of the workplace. 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 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 eye irritation persists: 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	Store in a well-ventilated place. Keep cool. 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	%	
Polyester resin		N/A	30 - 60	
Styrene		100-42-5	15 - 40	
Silica, amorphous, fumed		112926-00-8	5 - 10	
Silica, amorphous, fumed	Silica, amorphous, fumed, crystfree	112945-52-5	1 - 5	
Titanium dioxide	Titanium dioxide	13463-67-7	1 - 5	
Limestone		1317-65-3	0.5 - 1.5	
Other components below reportable levels			10 - 30	

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

4. First-aid measures	
Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
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	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.
Most important symptoms/effects, acute and delayed	Aspiration may cause pulmonary oedema and pneumonitis. Headache. Dizziness. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash. 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. 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.
Material name: PDB 6000	SDS CANADA

Material name: PDR 6000

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	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

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. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

avoid environmental contamination.

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".

Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to

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

cupational exposure limits US. ACGIH Threshold Limit Value	S		
Components	Туре	Value	
STYRENE (CAS 100-42-5)	STEL	40 ppm	
	TWA	20 ppm	
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m3	

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

Components	Туре	Value	
Limestone (CAS 1317-65-3)	TWA	10 mg/m3	
STYRENE (CAS 100-42-5)	STEL	170 mg/m3	
		40 ppm	
	TWA	85 mg/m3	
		20 ppm	
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m3	

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

Components	Туре	Value	Form
Limestone (CAS 1317-65-3)	STEL	20 mg/m3	Total dust.
	TWA	3 mg/m3	Respirable fraction.
		10 mg/m3	Total dust.
SILICA, AMORPHOUS, FUMED (CAS 112926-00-8)	TWA	4 mg/m3	Total
		1.5 mg/m3	Respirable.
STYRENE (CAS 100-42-5)	STEL	75 ppm	
	TWA	50 ppm	
Titanium dioxide (CAS 13463-67-7)	TWA	3 mg/m3	Respirable fraction.
		10 mg/m3	Total dust.
Canada. Manitoba OELs (Reg. 217	/2006, The Workplace Safety	And Health Act)	
Components	Туре	Value	

STYRENE (CAS 100-42-5)	STEL	40 ppm	
	TWA	20 ppm	
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m3	

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

Components	Туре	Value	
STYRENE (CAS 100-42-5)	STEL	100 ppm	
	TWA	35 ppm	
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m3	

Canada. Quebec OELs. (N Components	linistry of Labor	 Regulation respecting Type 		nealth and sat lue	fety) Form
Limestone (CAS 1317-65-3)	TWA	10	mg/m3	Total dust.
SILICA, AMORPHOUS, FUMED (CAS 112926-00-8)	TWA	6 r	ng/m3	Respirable dust.
STYRENE (CAS 100-42-5)		STEL	42	6 mg/m3	
			10	0 ppm	
		TWA	21	3 mg/m3	
			50	ppm	
Titanium dioxide (CAS 13463-67-7)		TWA	10	mg/m3	Total dust.
Canada. Saskatchewan O Components	ELs (Occupation	al Health and Safety Re Type	-	6, Table 21) lue	
Limestone (CAS 1317-65-3)	15 minute	20	mg/m3	
		8 hour	10	mg/m3	
STYRENE (CAS 100-42-5)		15 minute	40	ppm	
		8 hour	20	ppm	
Titanium dioxide (CAS 13463-67-7)		15 minute	20	mg/m3	
		8 hour	10	mg/m3	
ological limit values ACGIH Biological Exposu Components	re Indices Value	Determinant	Specimen	Sampling 1	lime
STYRENE (CAS 100-42-5)	40 µg/l	Styrene	Urine	*	
	400 mg/g	Mandelic acid plus phenylglyoxylic acid	Creatinine in urine	*	
* - For sampling details, ple	ase see the sourc	e document.			
posure guidelines Canada - Quebec OELs: S	kin designation				
Styrene (CAS 100-42-5	•	Can be	absorbed throu	ah the skin	
propriate engineering ntrols	Explosion-pro Ventilation rat exhaust ventil exposure limit	of general and local exhates should be matched to	aust ventilation. conditions. If ap ng controls to ma not been estab	Good general oplicable, use j aintain airborne lished, mainta	ventilation should be used. process enclosures, local e levels below recommender in airborne levels to an
lividual protection measure	-				
Eye/face protection	Chemical resp	pirator with organic vapor	ur cartridge and	tull tacepiece.	
Skin protection Hand protection	Wear appropr	riate chemical resistant g	loves.		
Other	Wear appropr	riate chemical resistant c	lothing. Use of a	n impervious a	apron is recommended.
Respiratory protection	Chemical resp	pirator with organic vapo	ur cartridge and	full facepiece.	
Thermal hazards	Wear appropr	riate thermal protective c	lothing, when ne	cessary.	
neral hygiene nsiderations	and drink. Alw material and b	vays observe good perso before eating, drinking, a	nal hygiene mea nd/or smoking.	sures, such as Routinely was	smoke. Keep away from foo s washing after handling the n work clothing and protectiv uld not be allowed out of the
Physical and chemica	I properties				
•	• •				
pearance Physical state	Viscous. Liqui Liquid.	id.			

Form	Viscous. Liquid.		
Colour	White.		
Odour	Aromatic		
Odour threshold	Not available.		
рН	Not available.		
Melting point/freezing point	-31 °C (-23.8 °F) estimated		
Initial boiling point and boiling range	145 °C (293 °F) estimated		
Flash point	32.0 °C (89.6 °F) estimated		
Evaporation rate	Not available.		
Flammability (solid, gas)	Not applicable.		
Upper/lower flammability or exp			
Flammability limit - lower (%)	1.1 % estimated		
Flammability limit - upper (%)	6.1 % estimated		
Explosive limit - lower (%)	Not available.		
Explosive limit – upper (%)	Not available.		
Vapour pressure	8.53 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	490 °C (914 °F) estimated		
Decomposition temperature	Not available.		
Viscosity	Not available.		
Other information			
Density	1.29 g/cm3 estimated		
Explosive properties	Not explosive.		
Flammability class	Flammable IC estimated		
Oxidising properties	Not oxidising.		
Specific gravity	1.29 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	Hazardous polymerisation does not occur.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong acids. Strong oxidising agents. Aluminium. Peroxides.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of ex	cposure
Inhalation	Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation. May cause an allergic skin reaction.
Eye contact	Causes serious eye irritation.

Ingestion	Harmful if swallowed. Droplets vomiting may cause a serious	of the product aspirated into the lungs through ingestion or chemical pneumonia.
Symptoms related to the physical, chemical and toxicological characteristics	irritation. Symptoms may inclu	ary oedema and pneumonitis. Headache. Dizziness. Severe eye de stinging, tearing, redness, swelling, and blurred vision. Skin and pain. May cause an allergic skin reaction. Dermatitis. Rash.
Information on toxicological effe	ects	
Acute toxicity	May be fatal if swallowed and	enters airways.
Components	Species	Test Results
Silica, amorphous, fumed (CAS 11	2926-00-8)	
Acute		
Oral		
LD50	Rat	> 22500 mg/kg
Silica, amorphous, fumed (CAS 11	2945-52-5)	
Acute		
Oral	Det	
LD50	Rat	> 22500 mg/kg
Styrene (CAS 100-42-5)		
<u>Acute</u>		
Oral LD50	Rat	1 g/kg
		1 9/19
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/eye irritation	Causes serious eye irritation.	
Respiratory or skin sensitisatior	1	
Canada - Alberta OELs: Irrita		
Limestone (CAS 1317-65	-3)	Irritant
Titanium dioxide (CAS 13	463-67-7)	Irritant
Respiratory sensitisation		of data the classification is not possible.
Skin sensitisation	May cause an allergic skin rea	ction.
Germ cell mutagenicity	May cause genetic defects.	
Carcinogenicity	May cause cancer.	
ACGIH Carcinogens		
Styrene (CAS 100-42-5) Titanium dioxide (CAS 13	463-67-7)	A4 Not classifiable as a human carcinogen. A4 Not classifiable as a human carcinogen.
Canada - Manitoba OELs: ca		
Styrene (CAS 100-42-5)		Not classifiable as a human carcinogen.
Titanium dioxide (CAS 13		Not classifiable as a human carcinogen.
Canada - Quebec OELs: Car Styrene (CAS 100-42-5)	chlogen category	Detected carcinogenic effect in animals.
	Evaluation of Carcinogenicity	
Silica, amorphous, fumed		3 Not classifiable as to carcinogenicity to humans.
Silica, amorphous, fumed	(CAS 112945-52-5)	3 Not classifiable as to carcinogenicity to humans.
Styrene (CAS 100-42-5) Titanium dioxide (CAS 13	463-67-7)	2A Probably carcinogenic to humans. 2B Possibly carcinogenic to humans.
	gram (NTP) Report on Carcine	
Styrene (CAS 100-42-5)		Reasonably Anticipated to be a Human Carcinogen.
Reproductive toxicity	Suspected of damaging fertilit	y or the unborn child.
Specific target organ toxicity - single exposure	Due to partial or complete lack	of data the classification is not possible.
Specific target organ toxicity - repeated exposure	Causes damage to organs thr	bugh prolonged or repeated exposure.
Aspiration hazard	May be fatal if swallowed and	enters airways.
Chronic effects	Prolonged inhalation may be h exposure. Prolonged exposure	armful. Causes damage to organs through prolonged or repeated may cause chronic effects.

12. Ecological information	
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-octain Styrene	nol / water (log Kow) 2.95
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 consideration	ons
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.

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	
IDG	

TDG	
UN number	UN1866
UN proper shipping name	RESIN SOLUTION, flammable
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	11
Environmental hazards	Not available.
· ·	Read safety instructions, SDS and emergency procedures before handling.
ΙΑΤΑ	
UN number	UN1866
UN proper shipping name	Resin solution flammable
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	11
Environmental hazards	No.
ERG Code	3L
· ·	Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo	Allowed with restrictions.
aircraft	
Cargo aircraft only	Allowed with restrictions.
UN number	UN1866
UN proper shipping name	RESIN SOLUTION flammable
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group Environmental hazards	11
	NI-
Marine pollutant	No.
EmS Special pressutions for user	F-E, <u>S-E</u> Read safety instructions, SDS and emorgeney procedures before handling
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

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

IATA; IMDG; TDG



15. Regulatory information

Canadian regulations	This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.	
Controlled Drugs and Subs	tances Act	
Not regulated.		
Export Control List (CEPA 1	1999, Schedule 3)	
Not listed. Greenhouse Gases		
Not listed.		
Precursor Control Regulation	ons	
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)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes
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*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 informati	on
Issue date	07-July-2019
Revision date	06-May-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.