# SAFETY DATA SHEET

# 1. Identification

Product identifier PDR 9000 SLOW

Other means of identification

SKU# 103104

Recommended use Not available.

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Company name ITW Performance Polymers

Address 35 Brownridge Rd

Unit 1

Halton Hills, ON L7G 0C6

Contact personCustomer ServiceTelephone number978-777-1100

Fax E-mail

**Emergency telephone** 

number

800-424-9300

Supplier Not available.

# 2. Hazard identification

Physical hazards Flammable liquids Category 3 **Health hazards** Skin corrosion/irritation Category 2 Serious eye damage/eye irritation Category 2A Germ cell mutagenicity Category 1B Carcinogenicity Category 1 Reproductive toxicity Category 2 Specific target organ toxicity following Category 1

repeated exposure

Aspiration hazard Category 1

Environmental hazards Not classified.

Label elements



Signal word Danger

**Hazard statement** Flammable liquid and vapour. May be fatal if swallowed and enters airways. Causes skin irritation.

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. Wear protective gloves/protective clothing/eye protection/face protection.

IF SWALLOWED: Immediately call a POISON CENTRE/doctor. Do NOT induce vomiting. IF ON Response

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 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.

Store in a well-ventilated place. Keep cool. Store locked up. Storage

**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	15 - 40
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
ALPHA-METHYLSTYRENE		98-83-9	0.5 - 1.5
Titanium dioxide	Titanium dioxide	13463-67-7	0.5 - 1.5
SILICA, CRYSTALLINE, QUAR	TZ	14808-60-7	0.1 - 1
Other components below reportable levels			15 - 40

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

Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation

occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if Eye contact present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

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

Ingestion

delayed

Indication of immediate medical attention and special treatment needed

Aspiration may cause pulmonary oedema and pneumonitis. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. Prolonged exposure may cause chronic effects.

Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

General information Take off all contaminated clothing immediately. IF 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.

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

Fire fighting

equipment/instructions

Specific methods General fire hazards Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.

Use standard firefighting procedures and consider the hazards of other involved materials.

Flammable liquid and vapour.

### 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. 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. 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.

For additional information on equipment bonding and grounding, refer to the Canadian Electrical Code in Canada, (CSA C22.1), or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents" or National Fire Protection Association (NFPA) 77, "Recommended Practice on Static Electricity" or National Fire Protection Association (NFPA) 70, "National Electrical Code".

Conditions for safe storage, including any incompatibilities Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Eliminate sources of ignition. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

# 8. Exposure controls/personal protection

# Occupational exposure limits

ALPHA-METHYLSTYRENE	US. ACGIH Threshold Limit Values			_
CAS 98-83-9   SILICA, CRYSTALLINE. DURATZ (CAS 14808-60-7) STYRENE (CAS 100-42-5) STEL TWA 20 ppm Titanium dioxide (CAS TWA 10 mg/m3 3463-67-7) Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) Components Type Value Form  ALPHA-METHYLSTYRENE CAS 98-83-9) STEL TWA 100 ppm TWA 242 mg/m3 50 ppm TWA 242 mg/m3 50 ppm TWA 20 ppm TWA 242 mg/m3 50 ppm SILICA, CRYSTALLINE, TWA 20 ppm TWA 20 ppm TWA 210 ppm 40 ppm	Components	Туре	Value	Form
STYRENE (CAS 14908-60-7)   TWA	ALPHA-METHYLSTYRENE (CAS 98-83-9)	TWA	10 ppm	
TWA   20 ppm   10 mg/m3   10 mg/m3   10 mg/m3   13463-67-7)   10 mg/m3   13463-67-7)   10 mg/m3   13463-67-7)   10 mg/m3   13463-67-7)   10 mg/m3   10 m	SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.
Titanium dioxide (CAS   TWA   10 mg/m3   1	STYRENE (CAS 100-42-5)	STEL	40 ppm	
Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)   Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)   Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)   Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)   Canada. Structure of the control of the cont		TWA	20 ppm	
Name	Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m3	
CAS 98-83-9)  TWA 242 mg/m3 50 ppm  SILICA, CRYSTALLINE, TWA 0.025 mg/m3 Respirable particles.  2UARTZ (CAS 14808-60-7)  STYRENE (CAS 100-42-5)  TWA 85 mg/m3 20 ppm  TWA 85 mg/m3 20 ppm  TWA 10 mg/m3  Alafos-67-7)  Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)  ALPHA-METHYLSTYRENE TWA 10 ppm  ALPHA-METHYLSTYRENE TWA 10 ppm  SILICA, CRYSTALLINE, TWA 4 mg/m3 Total  SILICA, CRYSTALLINE, TWA 0.025 mg/m3 Respirable fraction.  SILICA, CRYSTALLINE, TWA 50 ppm  Fitanium dioxide (CAS 14808-60-7)  STYRENE (CAS 100-42-5)  TWA 3 mg/m3 Respirable fraction.  Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) Components Type Walue Form  ALPHA-METHYLSTYRENE TWA 3 mg/m3 Respirable fraction.  Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) Components Type Walue Form  ALPHA-METHYLSTYRENE TWA 3 mg/m3 Respirable fraction.  Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) Components Type Walue Form  ALPHA-METHYLSTYRENE TWA 0.025 mg/m3 Respirable fraction.  Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) Components Type Walue Form  ALPHA-METHYLSTYRENE TWA 0.025 mg/m3 Respirable fraction.  CAS 98-83-9)  STYRENE (CAS 14808-60-7)  STYRENE (CAS 100-42-5)  STEL 40 ppm  Fitanium dioxide (CAS 14808-60-7)  STYRENE (CAS 100-42-5)  STEL 40 ppm  Fitanium dioxide (CAS TWA 10 mg/m3	Canada. Alberta OELs (Occupatior Components	- ·		Form
TWA   242 mg/m3   50 ppm   50 ppm   50 ppm   50 ppm   50 ppm   50 ppm   70 ppm   7	ALPHA-METHYLSTYRENE (CAS 98-83-9)	STEL	483 mg/m3	
SILICA, CRYSTALLINE,   TWA   0.025 mg/m3   Respirable particles.			100 ppm	
SILICA, CRYSTALLINE, 20JARTZ (CAS 14808-60-7)   STEL		TWA	242 mg/m3	
STYRENE (CAS 14808-60-7)   STEL			50 ppm	
TWA 85 mg/m3 20 ppm  Titanium dioxide (CAS TWA 10 mg/m3 31463-67-7)  Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) Components Type Value Form  ALPHA-METHYLSTYRENE TWA 10 ppm  CAS 98-83-9)  SILICA, AMORPHOUS, TWA 4 mg/m3 Total  SILICA, CRYSTALLINE, TWA 0.025 mg/m3 Respirable.  SILICA, CRYSTALLINE, TWA 0.025 mg/m3 Respirable fraction.  STYRENE (CAS 100-42-5) STEL 75 ppm  TWA 50 ppm  Titanium dioxide (CAS TWA 3 mg/m3 Respirable fraction.  Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) Components Type Value Form  ALPHA-METHYLSTYRENE TWA 0.025 mg/m3 Respirable fraction.  CAS 98-83-9)  SILICA, CRYSTALLINE, TWA 0.025 mg/m3 Respirable fraction.  Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) Components Type Value Form  ALPHA-METHYLSTYRENE TWA 0.025 mg/m3 Respirable fraction.  STYRENE (CAS 14808-60-7)  STYRENE (CAS 100-42-5) STEL 40 ppm  TWA 20 ppm  STYRENE (CAS 100-42-5) TWA 10 mg/m3	SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable particles.
TWA   85 mg/m3   20 ppm	STYRENE (CAS 100-42-5)	STEL	170 mg/m3	
20 ppm     10 mg/m3     10 mg/m3   10 mg/m3     10 mg/m3   10 mg			40 ppm	
Titanium dioxide (CAS   TWA   10 mg/m3   1		TWA	85 mg/m3	
Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)   Components   Type   Value   Form				
Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)         Type         Value         Form           ALPHA-METHYLSTYRENE         TWA         10 ppm         CAS 98-83-9)         Total           SILICA, AMORPHOUS, EUMED (CAS 112926-00-8)         TWA         4 mg/m3         Total           FUMED (CAS 112926-00-8)         TWA         0.025 mg/m3         Respirable.           SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)         STEL         75 ppm         Respirable fraction.           STYRENE (CAS 100-42-5)         STEL         75 ppm         TWA         3 mg/m3         Respirable fraction.           STYRENE (CAS 100-42-5)         TWA         3 mg/m3         Respirable fraction.         Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)         Total dust.           Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)         Topm         Form           ALPHA-METHYLSTYRENE         TWA         10 ppm         Respirable fraction.           SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)         TWA         0.025 mg/m3         Respirable fraction.           STYRENE (CAS 100-42-5)         STEL         40 ppm           TWA         20 ppm         TWA         10 mg/m3			20 ppm	
Type   Value   Form	Titanium dioxide (CAS 13463-67-7)	TWA	• •	
CAS 98-83-9    SILICA, AMORPHOUS,	13463-67-7) Canada. British Columbia OELs. (C	Occupational Exposure Limits	10 mg/m3	ccupational Health and
TWA	13463-67-7) Canada. British Columbia OELs. (C Safety Regulation 296/97, as amen	Occupational Exposure Limited	10 mg/m3	•
SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)	13463-67-7)  Canada. British Columbia OELs. (C Safety Regulation 296/97, as amen Components  ALPHA-METHYLSTYRENE	Occupational Exposure Limiteded)  Type	10 mg/m3 s for Chemical Substances, Od Value	•
QUARTZ (CAS 14808-60-7)  STYRENE (CAS 100-42-5)  STEL  TWA  TWA  Titanium dioxide (CAS 13463-67-7)  TWA  Total dust.  Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) Components  Type  Value  Form  ALPHA-METHYLSTYRENE (CAS 98-83-9)  SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)  STYRENE (CAS 100-42-5)  STEL  TWA  10 ppm  TWA  TWA  TWA  TWA  TWA  TWA  TWA  TW	13463-67-7)  Canada. British Columbia OELs. (C Safety Regulation 296/97, as amen Components  ALPHA-METHYLSTYRENE (CAS 98-83-9)  SILICA, AMORPHOUS,	Occupational Exposure Limiteded)  Type  TWA	10 mg/m3 s for Chemical Substances, Oc Value 10 ppm	Form
TWA 50 ppm  Fitanium dioxide (CAS TWA 3 mg/m3 Respirable fraction. 10 mg/m3 Total dust.  Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) Components Type Value Form  ALPHA-METHYLSTYRENE (CAS 98-83-9)  SILICA, CRYSTALLINE, TWA 0.025 mg/m3 Respirable fraction. 20 ppm  STYRENE (CAS 100-42-5) STEL 40 ppm  TWA 20 ppm  Fitanium dioxide (CAS TWA 10 mg/m3	13463-67-7) Canada. British Columbia OELs. (C	Occupational Exposure Limiteded)  Type  TWA	10 mg/m3 s for Chemical Substances, Oc Value 10 ppm 4 mg/m3	<b>Form</b> Total
Titanium dioxide (CAS TWA 3 mg/m3 Respirable fraction. 13463-67-7)  Total dust.  Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) Components Type Value Form  ALPHA-METHYLSTYRENE TWA 10 ppm  (CAS 98-83-9)  SILICA, CRYSTALLINE, TWA 0.025 mg/m3 Respirable fraction. CUARTZ (CAS 14808-60-7)  STYRENE (CAS 100-42-5) STEL 40 ppm  TWA 20 ppm  Titanium dioxide (CAS TWA 10 mg/m3	13463-67-7)  Canada. British Columbia OELs. (C Safety Regulation 296/97, as amen Components  ALPHA-METHYLSTYRENE (CAS 98-83-9)  SILICA, AMORPHOUS, FUMED (CAS 112926-00-8)  SILICA, CRYSTALLINE,	Occupational Exposure Limiteded)  Type  TWA  TWA	10 mg/m3 s for Chemical Substances, Oc Value 10 ppm 4 mg/m3 1.5 mg/m3	Form  Total  Respirable.
Total dust.  Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) Components  Type  Value  Form  ALPHA-METHYLSTYRENE (CAS 98-83-9)  SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)  STYRENE (CAS 100-42-5)  STEL TWA 20 ppm  Titanium dioxide (CAS  TWA 10 mg/m3	13463-67-7)  Canada. British Columbia OELs. (C Safety Regulation 296/97, as amen Components  ALPHA-METHYLSTYRENE (CAS 98-83-9)  SILICA, AMORPHOUS, FUMED (CAS 112926-00-8)  SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)	Occupational Exposure Limits ded) Type TWA TWA TWA	10 mg/m3 s for Chemical Substances, Octoor Value 10 ppm 4 mg/m3 1.5 mg/m3 0.025 mg/m3	Form  Total  Respirable.
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Components         Type         Value         Form           ALPHA-METHYLSTYRENE (CAS 98-83-9)         TWA         10 ppm           SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)         TWA         0.025 mg/m3         Respirable fraction.           STYRENE (CAS 100-42-5)         STEL         40 ppm           TWA         20 ppm           Fitanium dioxide (CAS         TWA         10 mg/m3	13463-67-7)  Canada. British Columbia OELs. (C Safety Regulation 296/97, as amen Components  ALPHA-METHYLSTYRENE (CAS 98-83-9)  SILICA, AMORPHOUS,	Occupational Exposure Limits ded) Type TWA TWA TWA STEL TWA	10 mg/m3 s for Chemical Substances, October Value 10 ppm 4 mg/m3 1.5 mg/m3 0.025 mg/m3 75 ppm 50 ppm	Form  Total  Respirable.  Respirable fraction.
Components         Type         Value         Form           ALPHA-METHYLSTYRENE (CAS 98-83-9)         TWA         10 ppm           SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)         TWA         0.025 mg/m3         Respirable fraction.           STYRENE (CAS 100-42-5)         STEL         40 ppm           TWA         20 ppm           Fitanium dioxide (CAS         TWA         10 mg/m3	13463-67-7)  Canada. British Columbia OELs. (C Safety Regulation 296/97, as amen Components  ALPHA-METHYLSTYRENE (CAS 98-83-9) SILICA, AMORPHOUS, FUMED (CAS 112926-00-8)  SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7) STYRENE (CAS 100-42-5)  Titanium dioxide (CAS	Occupational Exposure Limits ded) Type TWA TWA TWA STEL TWA	10 mg/m3 s for Chemical Substances, October 10 ppm 4 mg/m3 1.5 mg/m3 0.025 mg/m3 75 ppm 50 ppm 3 mg/m3	Form  Total  Respirable.  Respirable fraction.
CAS 98-83-9)  SILICA, CRYSTALLINE, TWA 0.025 mg/m3 Respirable fraction.  STYRENE (CAS 100-42-5) STEL 40 ppm  TWA 20 ppm  Fitanium dioxide (CAS TWA 10 mg/m3	13463-67-7)  Canada. British Columbia OELs. (C Safety Regulation 296/97, as amen Components  ALPHA-METHYLSTYRENE (CAS 98-83-9) SILICA, AMORPHOUS, FUMED (CAS 112926-00-8)  SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7) STYRENE (CAS 100-42-5)  Titanium dioxide (CAS 13463-67-7)	Occupational Exposure Limits ded) Type TWA TWA TWA STEL TWA TWA	10 mg/m3 s for Chemical Substances, Od Value 10 ppm 4 mg/m3 1.5 mg/m3 0.025 mg/m3 75 ppm 50 ppm 3 mg/m3 10 mg/m3	Form  Total  Respirable.  Respirable fraction.
SILICA, CRYSTALLINE,       TWA       0.025 mg/m3       Respirable fraction.         QUARTZ (CAS 14808-60-7)       STEL       40 ppm         STYRENE (CAS 100-42-5)       TWA       20 ppm         Fitanium dioxide (CAS       TWA       10 mg/m3	13463-67-7)  Canada. British Columbia OELs. (C Safety Regulation 296/97, as amen Components  ALPHA-METHYLSTYRENE (CAS 98-83-9)  SILICA, AMORPHOUS, FUMED (CAS 112926-00-8)  SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)  STYRENE (CAS 100-42-5)  Titanium dioxide (CAS 13463-67-7)  Canada. Manitoba OELs (Reg. 217/	Occupational Exposure Limits ded) Type TWA TWA TWA STEL TWA TWA TWA TWA	10 mg/m3 s for Chemical Substances, Octo Value 10 ppm 4 mg/m3 1.5 mg/m3 0.025 mg/m3 75 ppm 50 ppm 3 mg/m3 10 mg/m3 And Health Act)	Form  Total  Respirable.  Respirable fraction.  Respirable fraction.  Total dust.
STYRENE (CAS 100-42-5)         STEL         40 ppm           TWA         20 ppm           Fitanium dioxide (CAS         TWA         10 mg/m3	13463-67-7)  Canada. British Columbia OELs. (C Safety Regulation 296/97, as amen Components  ALPHA-METHYLSTYRENE (CAS 98-83-9) SILICA, AMORPHOUS, FUMED (CAS 112926-00-8)  SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7) STYRENE (CAS 100-42-5)  Titanium dioxide (CAS 13463-67-7)	Occupational Exposure Limits ded) Type TWA TWA TWA STEL TWA	10 mg/m3 s for Chemical Substances, Octo  Value  10 ppm 4 mg/m3 1.5 mg/m3 0.025 mg/m3 75 ppm 50 ppm 3 mg/m3 10 mg/m3 And Health Act) Value	Form  Total  Respirable.  Respirable fraction.  Respirable fraction.  Total dust.
Titanium dioxide (CAS TWA 10 mg/m3	13463-67-7)  Canada. British Columbia OELs. (C Safety Regulation 296/97, as amen Components  ALPHA-METHYLSTYRENE (CAS 98-83-9) SILICA, AMORPHOUS, FUMED (CAS 112926-00-8)  SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7) STYRENE (CAS 100-42-5)  Titanium dioxide (CAS 13463-67-7)  Canada. Manitoba OELs (Reg. 217/ Components  ALPHA-METHYLSTYRENE (CAS 98-83-9) SILICA, CRYSTALLINE,	Occupational Exposure Limits ded) Type TWA TWA TWA STEL TWA	10 mg/m3 s for Chemical Substances, Od Value 10 ppm 4 mg/m3 1.5 mg/m3 0.025 mg/m3 75 ppm 50 ppm 3 mg/m3 10 mg/m3 And Health Act) Value 10 ppm	Form  Total  Respirable. Respirable fraction.  Respirable fraction.  Total dust.  Form
	13463-67-7)  Canada. British Columbia OELs. (C Safety Regulation 296/97, as amen Components  ALPHA-METHYLSTYRENE (CAS 98-83-9)  SILICA, AMORPHOUS, FUMED (CAS 112926-00-8)  SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)  STYRENE (CAS 100-42-5)  Titanium dioxide (CAS 13463-67-7)  Canada. Manitoba OELs (Reg. 217/ Components  ALPHA-METHYLSTYRENE	Type TWA TWA STEL TWA	10 mg/m3 s for Chemical Substances, Occ Value 10 ppm 4 mg/m3 1.5 mg/m3 0.025 mg/m3 75 ppm 50 ppm 3 mg/m3 10 mg/m3 And Health Act) Value 10 ppm 0.025 mg/m3	Form  Total  Respirable. Respirable fraction.  Respirable fraction.  Total dust.  Form
	13463-67-7)  Canada. British Columbia OELs. (C Safety Regulation 296/97, as amen Components  ALPHA-METHYLSTYRENE (CAS 98-83-9)  SILICA, AMORPHOUS, FUMED (CAS 112926-00-8)  SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)  STYRENE (CAS 100-42-5)  Titanium dioxide (CAS 13463-67-7)  Canada. Manitoba OELs (Reg. 217/ Components  ALPHA-METHYLSTYRENE (CAS 98-83-9)  SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)	Type TWA TWA STEL TWA	to mg/m3  s for Chemical Substances, Octo  Value  10 ppm  4 mg/m3  1.5 mg/m3  0.025 mg/m3  75 ppm 50 ppm 3 mg/m3  10 mg/m3  And Health Act)  Value  10 ppm  0.025 mg/m3  40 ppm	Form  Total  Respirable. Respirable fraction.  Respirable fraction.  Total dust.  Form

Components	ntrol of Exposure to Biological or Type	Value	Form
ALPHA-METHYLSTYRENE CAS 98-83-9)	TWA	10 ppm	
ILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)	TWA	0.1 mg/m3	Respirable fraction.
STYRENE (CAS 100-42-5)	STEL	100 ppm	
	TWA	35 ppm	
itanium dioxide (CAS 3463-67-7)	TWA	10 mg/m3	
		cting occupational health and saf	
omponents	Туре	Value	Form
LPHA-METHYLSTYRENE CAS 98-83-9)	STEL	483 mg/m3	
		100 ppm	
	TWA	242 mg/m3	
		50 ppm	
ILICA, AMORPHOUS, UMED (CAS 112926-00-8)	TWA	6 mg/m3	Respirable dust.
ILICA, CRYSTALLINE, UARTZ (CAS 14808-60-7)	TWA	0.1 mg/m3	Respirable dust.
TYRENE (CAS 100-42-5)	STEL	426 mg/m3	
		100 ppm	
	TWA	213 mg/m3	
		50 ppm	
itanium dioxide (CAS 3463-67-7)	TWA	10 mg/m3	Total dust.
anada. Saskatchewan OE components	∟s (Occupational Health and Safe Type	ty Regulations, 1996, Table 21) Value	Form
LPHA-METHYLSTYRENE CAS 98-83-9)	15 minute	100 ppm	
	8 hour	50 ppm	
ILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)	8 hour	0.05 mg/m3	Respirable fraction.
TYRENE (CAS 100-42-5)	15 minute	40 ppm	
	8 hour	20 ppm	
	15 minute	20 mg/m3	
	8 hour	10 mg/m3	
3463-67-7)	8 hour	10 mg/m3	
itanium dioxide (CAS 3463-67-7) gical limit values CGIH Biological Exposure components		-	

# Biol

STYRENE (CAS 100-42-5) 40 μg/l Styrene Urine 400 mg/g Mandelic acid Creatinine in plus urine phenylglyoxylic acid

# **Exposure guidelines**

Canada - Quebec OELs: Skin designation

Styrene (CAS 100-42-5)

Can be absorbed through the skin.

<sup>\* -</sup> For sampling details, please see the source document.

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. 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 Viscous. Liquid.

Physical state Liquid.

Form Liquid. Viscous.

Colour White.

Odour Aromatic

Odour threshold Not available.
pH Not available.

Melting point/freezing point -31 °C (-23.8 °F) estimated Initial boiling point and boiling 145 °C (293 °F) estimated

range

Flash point 32.0 °C (89.6 °F) estimated

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower

limit - lower 1.1

(%)

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 densityNot available.Relative densityNot available.

Solubility(ies)

Solubility (water) Not available.

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperature 490 °C (914 °F) estimated

Decomposition temperatureNot available.ViscosityNot available.

Other information

**Density** 1.54 g/cm3 estimated

**Explosive properties** Not explosive.

Flammability class Flammable IC estimated

Oxidising properties Not oxidising.

Specific gravity 1.54 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**Hazardous polymerisation does not occur.

reactions

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 exposure

**Inhalation** Prolonged inhalation may be harmful.

**Skin contact** Causes skin irritation.

**Eye contact** Causes serious eye irritation.

Ingestion Knowledge about health hazard is incomplete. 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. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness

and pain.

### Information on toxicological effects

**Acute toxicity** May be fatal if swallowed and enters airways.

Components Species Test Results

ALPHA-METHYLSTYRENE (CAS 98-83-9)

Acute Oral

LD50 Rat 4900 mg/kg

Silica, amorphous, fumed (CAS 112926-00-8)

Acute Oral

LD50 Rat > 22500 mg/kg

Silica, amorphous, fumed (CAS 112945-52-5)

Acute Oral

LD50 Rat > 22500 mg/kg

Styrene (CAS 100-42-5)

<u>Acute</u>

Oral

LD50 Rat 1 g/kg

**Skin corrosion/irritation** Causes skin irritation.

Serious eye damage/eye Causes serious eye irritation.

irritation

#### Respiratory or skin sensitisation

### Canada - Alberta OELs: Irritant

Titanium dioxide (CAS 13463-67-7) Irritant

**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 May cause genetic defects.

Carcinogenicity May cause cancer.

**ACGIH Carcinogens** 

ALPHA-METHYLSTYRENE (CAS 98-83-9) A3 Confirmed animal carcinogen with unknown relevance to

humans.

SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7) A2 Suspected human carcinogen.

Styrene (CAS 100-42-5)

Titanium dioxide (CAS 13463-67-7)

Suspected human carcinogen.

Suspected human carcinogen.

A4 Not classifiable as a human carcinogen. A4 Not classifiable as a human carcinogen.

Confirmed animal carcinogen with unknown relevance to humans.

Canada - Alberta OELs: Carcinogen category

SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)

Canada - Manitoba OELs: carcinogenicity

ALPHA-METHYLSTYRENE (CAS 98-83-9)

SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)

Styrene (CAS 100-42-5)

Titanium dioxide (CAS 13463-67-7)

Not classifiable as a human carcinogen. Canada - Quebec OELs: Carcinogen category

SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7) Styrene (CAS 100-42-5)

Suspected carcinogenic effect in humans. Detected carcinogenic effect in animals.

Not classifiable as a human carcinogen.

IARC Monographs. Overall Evaluation of Carcinogenicity

ALPHA-METHYLSTYRENE (CAS 98-83-9)

Silica, amorphous, fumed (CAS 112926-00-8) Silica, amorphous, fumed (CAS 112945-52-5) SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)

Styrene (CAS 100-42-5)

Titanium dioxide (CAS 13463-67-7)

2B Possibly carcinogenic to humans.

3 Not classifiable as to carcinogenicity to humans. 3 Not classifiable as to carcinogenicity to humans.

1 Carcinogenic to humans.

2A Probably carcinogenic to humans. 2B Possibly carcinogenic to humans.

US. National Toxicology Program (NTP) Report on Carcinogens

SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)

Styrene (CAS 100-42-5)

Known To Be Human Carcinogen.

Reasonably Anticipated to be a Human Carcinogen.

Reproductive toxicity Suspected of damaging fertility 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 through prolonged or repeated exposure.

**Aspiration hazard** May be fatal if swallowed and enters airways.

**Chronic effects** 

Prolonged inhalation may be harmful. Causes damage to organs through prolonged or repeated

exposure. Prolonged exposure 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-octanol / water (log Kow)

ALPHA-METHYLSTYRENE 3.48 Styrene 2.95

Mobility in soil No data available.

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation Other adverse effects

potential, endocrine disruption, global warming potential) are expected from this component.

# 13. Disposal considerations

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of **Disposal instructions** 

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

Local disposal regulations Dispose in accordance with all applicable regulations.

The waste code should be assigned in discussion between the user, the producer and the waste Hazardous waste code

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.

Material name: PDR 9000 SLOW SDS CANADA

103104 Version #: 03 Revision date: 03-May-2020 Issue date: 07-July-2019

# 14. Transport information

### **TDG**

UN1866 **UN** number

RESIN SOLUTION, flammable UN proper shipping name

Transport hazard class(es)

3 Class Subsidiary risk П Packing group

Not available. **Environmental hazards** 

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

**IATA** 

UN1866 **UN number** 

UN proper shipping name Resin solution flammable

Transport hazard class(es) 3 Class Subsidiary risk Ш Packing group **Environmental hazards** No.

Other information

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

**ERG Code** 

aircraft

Passenger and cargo

Allowed with restrictions.

Cargo aircraft only

Allowed with restrictions.

**IMDG** 

**UN number** UN1866

UN proper shipping name **RESIN SOLUTION flammable** 

3L

Transport hazard class(es)

3 **Class** Subsidiary risk Ш Packing group **Environmental hazards** 

Marine pollutant No.

**EmS** F-E, <u>S-E</u>

Special precautions for user Read safety instructions, SDS and emergency procedures before handling. Not established.

Transport in bulk according to

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 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)	No
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes

<sup>\*</sup>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).

Toxic Substances Control Act (TSCA) Inventory

### 16. Other information

Issue date07-July-2019Revision date03-May-2020

Version No. 03

United States & Puerto Rico

**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

Material name: PDR 9000 SLOW SDS CANADA

Yes