


SAFETY DATA SHEET

1. Identification

Product identifier	Permatex High Temperature Thread Sealant
Other means of identification	
Product code	59206, 59234, 59225
Recommended use	sealant
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/Distributor information	
Manufacturer	
Company name	ITW Permatex Canada
Address	2360 Bristol Circle Suite 101 Oakville, ON L6H 6M5 Canada
Telephone	1-905-693-8900
e-mail	literature.canada@permatex.com
Emergency phone number	1-877-504-9352
Supplier	See above.

2. Hazard identification

Physical hazards	Not classified.	
Health hazards	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2A
	Carcinogenicity	Category 2
	Specific target organ toxicity following single exposure	Category 3 respiratory tract irritation
	Specific target organ toxicity following repeated exposure	Category 2
Environmental hazards	Not classified.	
Label elements		
Signal word	Warning	
Hazard statement	Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. Suspected of causing cancer. 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. Wash thoroughly after handling. Wear protective gloves, protective clothing, eye protection and face protection. Do not breathe the mist or vapour. Use only outdoors or in a well-ventilated area.	
Response	IF ON SKIN: Wash with plenty of water. Specific treatment (see information on this label). If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash it before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention. IF INHALED: remove person to fresh air and keep comfortable for breathing. Call a POISON CENTRE if you feel unwell. IF exposed or concerned: Get medical attention.	
Storage	Store in a well-ventilated place. Keep container tightly closed. Store locked up.	
Disposal	Dispose of container in accordance with local, regional, national and international regulations.	
Other hazards	None known.	

Supplemental information

Exempt - Consumer product

This product is not subject to the Hazardous Products Act (HPA) Part II (Hazardous Products) as per paragraph 12(j); Schedule 1 (Non-Application of Part II). This restriction states that Part II does not apply in respect of the sale or importation of anything listed in Schedule 1 which includes any cosmetic, device, drug or food, as defined in section 2 of the Food and Drugs Act, or any consumer product as defined in section 2 of the Canada Consumer Product Safety Act. Consult the product label for special protection or precautions that have been identified for using this product under directed use conditions.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
1-Octanol		111-87-5	5 - 10*
Cumene		98-82-8	0.1 - 1*
Hydroperoxide, 1-methyl-1-phenylethyl		80-15-9	1 - 5*
Polyethylene glycol methacrylate		25852-47-5	30 - 60*
Titanium oxide		13463-67-7	0.1 - 1*

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

Composition comments

*CANADA GHS: The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	IF INHALED: remove person to fresh air and keep comfortable for breathing. Call a POISON CENTRE or doctor if you feel unwell.
Skin contact	IF ON SKIN: Wash with plenty of water. Specific treatment (see information on this label). If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash it before reuse.
Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
Ingestion	Rinse mouth. Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Obtain medical attention.
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. Prolonged exposure may cause chronic effects.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically.
General information	IF exposed or concerned: Get medical advice. 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. Avoid contact with eyes and skin. Keep out of reach of children.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide.
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.
Hazardous combustion products	May include and are not limited to: Oxides of carbon.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapour. 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.
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Methods and materials for containment and cleaning up

Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. 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. Do not discharge into lakes, streams, ponds or public waters.

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 breathe mist or vapour. Avoid contact with eyes, skin, and clothing. Provide adequate ventilation. Avoid prolonged exposure. Wear appropriate personal protective equipment. Wash thoroughly after handling. Use good industrial hygiene practices in handling this material. When using do not eat or drink.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS). Keep out of reach of children.

8. Exposure controls/Personal protection

Occupational exposure limits**US. ACGIH Threshold Limit Values**

Components	Type	Value
Cumene (CAS 98-82-8)	TWA	50 ppm
Titanium oxide (CAS 13463-67-7)	TWA	10 mg/m3

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

Components	Type	Value
Cumene (CAS 98-82-8)	TWA	246 mg/m3 50 ppm
Titanium oxide (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	Type	Value	Form
Cumene (CAS 98-82-8)	STEL	75 ppm	
	TWA	25 ppm	
Titanium oxide (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	Type	Value
Cumene (CAS 98-82-8)	TWA	50 ppm
Titanium oxide (CAS 13463-67-7)	TWA	10 mg/m3

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

Components	Type	Value
Cumene (CAS 98-82-8)	TWA	50 ppm
Titanium oxide (CAS 13463-67-7)	TWA	10 mg/m3

Canada. Quebec OELs. (Ministry of Labour - Regulation Respecting the Quality of the Work Environment)

Components	Type	Value	Form
Cumene (CAS 98-82-8)	TWA	246 mg/m3 50 ppm	
Titanium oxide (CAS 13463-67-7)	TWA	10 mg/m3	Total dust.

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) 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.

Individual protection measures, such as personal protective equipment

Eye/face protection	Wear safety glasses with side shields (or goggles).
Skin protection	
Hand protection	Wear appropriate chemical resistant gloves. Confirm with a reputable supplier first.
Other	Wear appropriate chemical resistant clothing. As required by employer code.
Respiratory protection	Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. Respirator should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134), CAN/CSA-Z94.4 and ANSI's standard for respiratory protection (Z88.2).
Thermal hazards	Not applicable.
General hygiene considerations	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. When using do not eat or drink.

9. Physical and chemical properties

Appearance	Paste.
Physical state	Liquid.
Form	Liquid.
Colour	White
Odour	Mild
Odour threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	> 200 °C (> 392 °F)
Flash point	131.0 °C (267.8 °F)
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapour pressure	> 39.8 mm Hg
Vapour density	Not available.
Relative density	1.16 - 1.26
Solubility(ies)	
Solubility (Water)	Immiscible
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.
VOC (Weight %)	0.75 % 7.5 g/L

10. Stability and reactivity

Reactivity	This product may react with strong oxidising agents.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.

Conditions to avoid	Do not mix with other chemicals.
Incompatible materials	Strong oxidising agents.
Hazardous decomposition products	May include and are not limited to: Oxides of carbon.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause damage to organs through prolonged or repeated exposure by inhalation. May cause irritation to the respiratory system.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.
Ingestion	May cause stomach distress, nausea or vomiting.

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 effects

Acute toxicity May cause respiratory irritation.

Components	Species	Test results
1-Octanol (CAS 111-87-5)		
Acute		
<i>Dermal</i>		
LD50	Guinea pig	> 500 mg/kg, HSDB
	Rabbit	> 5 g/kg, HSDB
		2000 - 4000 mg/kg, 24 Hours, ECHA
<i>Inhalation</i>		
LC50	Not available	
<i>Oral</i>		
LD50	Mouse	1800 mg/kg, HSDB
	Rat	> 5000 mg/kg
		> 5 g/kg, HSDB
		18240 mg/kg, ECHA
		>= 5000 mg/kg, ECHA
Cumene (CAS 98-82-8)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 3160 mg/kg, 24 Hours, ECHA
<i>Inhalation</i>		
LC50	Mouse	2000 ppm, 7 Hours, HSDB
		24.7 mg/L, 2 Hours, HSDB
		10 mg/L, 7 Hours, ECHA
	Rat	8000 ppm, 4 Hours, HSDB
<i>Oral</i>		
LD50	Rat	2700 mg/kg, ECHA
		2260 mg/kg, ECHA
		2.9 g/kg, HSDB
Hydroperoxide, 1-methyl-1-phenylethyl (CAS 80-15-9)		
Acute		
<i>Dermal</i>		
LD50	Rat	1.1 - 1.4 ml/kg, HSDB
		500 mg/kg, HSDB
		1.1 ml/kg, HSDB
		0.5 ml/kg, HSDB
<i>Inhalation</i>		
LC50	Mouse	200 mg/L, 4 Hours, HSDB

Components	Species	Test results
<i>Oral</i> LD50	Rat	382 mg/kg, HSDB
Polyethylene glycol methacrylate (CAS 25852-47-5)		
Acute		
<i>Dermal</i> LD50	Not available	
<i>Inhalation</i> LC50	Not available	
<i>Oral</i> LD50	Not available	
Titanium oxide (CAS 13463-67-7)		
Acute		
<i>Dermal</i> LD50	Not available	
<i>Inhalation</i> LC50	Rat	> 6.8 mg/L, 4 Hours, ECHA > 3.6 mg/l/4h, ECHA > 2.3 mg/L, 4 Hours, ECHA 5.1 mg/L, 4 Hours, ECHA 3.4 mg/L, 4 Hours, ECHA
<i>Oral</i> LD50	Mouse	> 5000 mg/kg, ECHA
	Rat	> 25000 mg/kg, ECHA > 11000 mg/kg, ECHA > 5000 mg/kg, ECHA > 2000 mg/kg, ECHA
Skin corrosion/irritation	Causes skin irritation.	
Exposure minutes	Not available.	
Erythema value	Not available.	
Oedema value	Not available.	
Serious eye damage/eye irritation	Causes serious eye irritation.	
Corneal opacity value	Not available.	
Iris lesion value	Not available.	
Conjunctival reddening value	Not available.	
Conjunctival oedema value	Not available.	
Recover days	Not available.	
Respiratory or skin sensitisation		
Canada - Alberta OELs: Irritant		
Titanium oxide (CAS 13463-67-7)		Irritant
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 product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	Suspected of causing cancer. See below.	
ACGIH Carcinogens		
Titanium oxide (CAS 13463-67-7)		A4 Not classifiable as a human carcinogen.
Canada - Manitoba OELs: carcinogenicity		
Titanium dioxide (CAS 13463-67-7)		Not classifiable as a human carcinogen.
IARC Monographs. Overall Evaluation of Carcinogenicity		
Cumene (CAS 98-82-8)		Volume 101 - 2B Possibly carcinogenic to humans.
Titanium oxide (CAS 13463-67-7)		Volume 47, Volume 93 - 2B Possibly carcinogenic to humans.
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.	

Specific target organ toxicity - single exposure	May cause respiratory irritation.
Specific target organ toxicity - repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	Not an aspiration hazard.
Chronic effects	May cause damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.
Further information	Not available.

12. Ecological information

Ecotoxicity See below

Ecotoxicological data

Components		Species	Test results
1-Octanol (CAS 111-87-5)			
Aquatic			
Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>)	12.3 - 13.4 mg/L, 96 hours
Cumene (CAS 98-82-8)			
Algae	IC50	Algae	2.6 mg/L, 72 Hours
Crustacea	EC50	Daphnia	0.6 mg/L, 48 Hours
Aquatic			
Fish	LC50	Rainbow trout, donaldson trout (<i>Oncorhynchus mykiss</i>)	2.7 mg/L, 96 hours
Titanium oxide (CAS 13463-67-7)			
Aquatic			
Crustacea	EC50	Water flea (<i>Daphnia magna</i>)	> 1000 mg/L, 48 hours
Fish	LC50	Mummichog (<i>Fundulus heteroclitus</i>)	> 1000 mg/L, 96 hours
Persistence and degradability	No data is available on the degradability of this product.		
Bioaccumulative potential	No data available.		
Mobility in soil	No data available.		
Mobility in general	Not 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 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	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

General	Canada: TDG Proof of Classification: Classification Method: Classified as per Part 2, Sections 2.1 – 2.8 of the Transportation of Dangerous Goods Regulations. If applicable, the technical name and the classification of the product will appear below.
U.S. Department of Transportation (DOT)	Not regulated as dangerous goods.
Transportation of Dangerous Goods (TDG - Canada)	Not regulated as dangerous goods.

15. Regulatory information

Canadian federal 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.
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Canada CEPA Schedule I: Listed substance

Titanium oxide (CAS 13463-67-7) Listed.

Canada Priority Substances List (Second List): Listed substance

Titanium oxide (CAS 13463-67-7) Listed.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

WHMIS status Controlled

International regulations

Inventory status

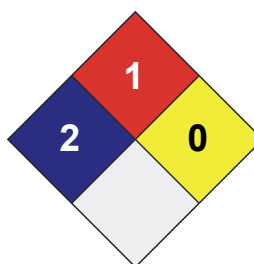
Country(s) or region	Inventory Name	On Inventory (Yes/No)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other information

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

HEALTH	* 2
FLAMMABILITY	1
PHYSICAL HAZARD	0
PERSONAL PROTECTION	X



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Other information For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document.

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