

# SAFETY DATA SHEET

## 1. Identification

**Product identifier** Red Gel High Strength 271 Threadlocker

**Other means of identification**

**Synonyms** 27115, 27135

**Recommended use** Thread Locking Compound

**Recommended restrictions** None known.

**Manufacturer/Importer/Supplier/Distributor information**

**Manufacturer**

**Company name** ITW Permatex Canada  
**Address** c/o ITW Global Brands Canada  
2360 Bristol Circle, Suite 101  
Oakville, ON L6H 6M5

**Telephone** 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 2
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.
- Suspected of causing cancer.
- May cause respiratory irritation.
- 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.
- Do not breathe mist or vapour.
- Use only outdoors or in a well-ventilated area.
- Wash thoroughly after handling.
- Wear protective gloves, protective clothing, eye protection and face protection.

**Response**

- IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash it before reuse. Specific treatment (see information on this label).
- 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.

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**3. Composition/information on ingredients**

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**Mixtures**

<b>Chemical name</b>	<b>Common name and synonyms</b>	<b>CAS number</b>	<b>%</b>
Benzene, (1-methylethyl)-		98-82-8	01 - 1 *
Hydroperoxide, 1-methyl-1-phenylethyl		80-15-9	1 - 5 *
Polyethylene glycol methacrylate		25852-47-5	45 - 70 *
Tetrasodium ethylenediamine tetraacetate		64-02-8	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.

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**4. First-aid measures**

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<b>Inhalation</b>	If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.
<b>Skin contact</b>	IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash it before reuse. Specific treatment (see information on this label).
<b>Eye contact</b>	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.
<b>Ingestion</b>	Rinse mouth. Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Never give anything by mouth if victim is unconscious or is convulsing. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Causes serious eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause respiratory irritation. Prolonged exposure may cause chronic effects.
<b>Indication of immediate medical attention and special treatment needed</b>	Symptoms may be delayed.
<b>General information</b>	IF exposed or concerned: Get medical attention. 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.

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**5. Fire-fighting measures**

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

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**6. Accidental release measures**

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<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Do not breathe mist or vapour. 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. Never return spills in original containers for re-use. Following product recovery, flush area with water. Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.

**Environmental precautions**

Do not discharge into lakes, streams, ponds or public waters.

## 7. Handling and storage

**Precautions for safe handling**

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

**Conditions for safe storage, including any incompatibilities**

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

## 8. Exposure controls/Personal protection

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

Components	Type	Value
Benzene, (1-methylethyl)- (CAS 98-82-8)	TWA	50 ppm

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

Components	Type	Value
Benzene, (1-methylethyl)- (CAS 98-82-8)	TWA	246 mg/m <sup>3</sup>
		50 ppm

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

Components	Type	Value
Benzene, (1-methylethyl)- (CAS 98-82-8)	STEL	75 ppm
	TWA	25 ppm

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

Components	Type	Value
Benzene, (1-methylethyl)- (CAS 98-82-8)	TWA	50 ppm

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

Components	Type	Value
Benzene, (1-methylethyl)- (CAS 98-82-8)	TWA	50 ppm

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

Components	Type	Value
Benzene, (1-methylethyl)- (CAS 98-82-8)	TWA	246 mg/m <sup>3</sup>
		50 ppm

**Biological limit values**

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

**Appropriate engineering controls**

Ensure adequate ventilation.

**Individual protection measures, such as personal protective equipment****Eye/face protection**

Wear safety glasses with side shields (or goggles).

**Skin protection****Hand protection**

Natural or butyl rubber, nitrile or neoprene gloves.

**Other**

As required by employer code.

<b>Respiratory protection</b>	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).
<b>Thermal hazards</b>	Not applicable.
<b>General hygiene considerations</b>	Handle in accordance with good industrial hygiene and safety practices. Wash hands before breaks and immediately after handling the product. When using do not eat or drink.

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## 9. Physical and chemical properties

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<b>Appearance</b>	Gel.
<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid.
<b>Colour</b>	Red
<b>Odour</b>	Mild
<b>Odour threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	> 149 °C (> 300.2 °F)
<b>Flash point</b>	> 95.0 °C (> 203.0 °F)
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit – upper (%)</b>	Not available.
<b>Vapour pressure</b>	Not available.
<b>Vapour density</b>	> 1 (Air = 1)
<b>Relative density</b>	1.11 - 1.15
<b>Solubility(ies)</b>	
<b>Solubility (Water)</b>	Insoluble
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Explosive properties</b>	Not explosive.
<b>Oxidising properties</b>	Not oxidising.

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## 10. Stability and reactivity

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<b>Reactivity</b>	May react with incompatible materials.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerisation does not occur.
<b>Conditions to avoid</b>	Do not mix with other chemicals.
<b>Incompatible materials</b>	Strong oxidising agents.
<b>Hazardous decomposition products</b>	May include and are not limited to: Oxides of carbon.

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## 11. Toxicological information

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### Information on likely routes of exposure

<b>Inhalation</b>	May cause respiratory tract irritation. Prolonged inhalation may be harmful.
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<b>Skin contact</b>	Causes skin irritation.
<b>Eye contact</b>	Causes serious eye irritation.
<b>Ingestion</b>	May cause stomach distress, nausea or vomiting.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Causes serious eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause respiratory irritation.

#### Information on toxicological effects

##### Acute toxicity

Components	Species	Test results
Benzene, (1-methylethyl)- (CAS 98-82-8)		
<b>Acute</b>		
<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)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rat	1.1 - 1.4 ml/kg, HSDB 500 mg/kg, HSDB 1.1 ml/kg 0.5 ml/kg, HSDB
<i>Inhalation</i>		
LC50	Mouse	200 mg/L, 4 Hours, HSDB
<i>Oral</i>		
LD50	Rat	382 mg/kg, HSDB
Polyethylene glycol methacrylate (CAS 25852-47-5)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Not available	
<i>Inhalation</i>		
LC50	Not available	
<i>Oral</i>		
LD50	Not available	
Tetrasodium ethylenediamine tetraacetate (CAS 64-02-8)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Not available	
<i>Inhalation</i>		
LC50	Not available	
<i>Oral</i>		
LD50	Rat	> 2000 mg/kg, HSDB 3200 mg/kg, ECHA 2700 mg/kg, ECHA 2581 mg/kg, ECHA 2150 mg/kg, ECHA

Components	Species	Test results
		1913 mg/kg, ECHA
		1780 mg/kg, ECHA
		1700 mg/kg, ECHA
		1658 mg/kg
<b>Skin corrosion/irritation</b>	Causes skin irritation.	
<b>Exposure minutes</b>	Not available.	
<b>Erythema value</b>	Not available.	
<b>Oedema value</b>	Not available.	
<b>Serious eye damage/eye irritation</b>	Causes serious eye irritation.	
<b>Corneal opacity value</b>	Not available.	
<b>Iris lesion value</b>	Not available.	
<b>Conjunctival reddening value</b>	Not available.	
<b>Conjunctival oedema value</b>	Not available.	
<b>Recover days</b>	Not available.	
<b>Respiratory or skin sensitisation</b>		
<b>Respiratory sensitisation</b>	Not a respiratory sensitizer.	
<b>Skin sensitisation</b>	This product is not expected to cause skin sensitisation.	
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
<b>Carcinogenicity</b>	See below.	
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>		
Benzene, (1-methylethyl)- (CAS 98-82-8)	Volume 101 - 2B Possibly carcinogenic to humans.	
<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects.	
<b>Specific target organ toxicity - single exposure</b>	May cause respiratory irritation.	
<b>Specific target organ toxicity - repeated exposure</b>	May cause damage to organs through prolonged or repeated exposure.	
<b>Aspiration hazard</b>	Not an aspiration hazard.	
<b>Chronic effects</b>	Prolonged exposure may cause chronic effects.	
<b>Further information</b>	Not available.	

## 12. Ecological information

<b>Ecotoxicity</b>	See below		
<b>Ecotoxicological data</b>			
<b>Components</b>	<b>Species</b>	<b>Test results</b>	
Benzene, (1-methylethyl)- (CAS 98-82-8)			
Algae	IC50	Algae	2.6 mg/L, 72 Hours
Crustacea	EC50	Daphnia	0.6 mg/L, 48 Hours
<b>Aquatic</b>			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	2.7 mg/L, 96 hours
Tetrasodium ethylenediamine tetraacetate (CAS 64-02-8)			
Algae	EC50	Algae	1.01 mg/L, 72 Hours
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia magna)	610 mg/L, 24 hours
Fish	LC50	Bluegill (Lepomis macrochirus)	472 - 500 mg/L, 96 hours
<b>Persistence and degradability</b>	No data is available on the degradability of this product.		
<b>Bioaccumulative potential</b>			
<b>Mobility in soil</b>	No data available.		
<b>Mobility in general</b>	Not available.		
<b>Other adverse effects</b>	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

<b>Disposal instructions</b>	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	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).
<b>Contaminated packaging</b>	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

<b>General</b>	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.
<b>Transportation of Dangerous Goods (TDG - Canada)</b>	Not regulated as dangerous goods.

### 15. Regulatory information

<b>Canadian federal regulations</b>	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.
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#### Export Control List (CEPA 1999, Schedule 3)

Not listed.

#### Greenhouse Gases

Not listed.

#### Precursor Control Regulations

Not regulated.

**WHMIS status** Exempt

#### International regulations

#### Inventory status

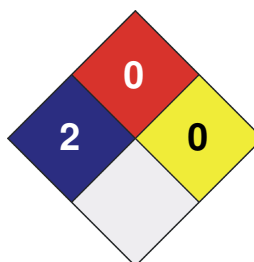
Country(s) or region	Inventory Name	On Inventory (Yes/No)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No

\*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

<b>HEALTH</b>	* 2
<b>FLAMMABILITY</b>	0
<b>PHYSICAL HAZARD</b>	0
<b>PERSONAL PROTECTION</b>	X



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

**Disclaimer** Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

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