


SAFETY DATA SHEET

1. Identification

Product identifier	Blue Liquid Medium Strength 242 Threadlocker
Other means of identification	
Synonyms	24200, 24209, 24240, 24242, 24250, 24225
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	Not available.
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.	

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Benzene, (1-methylethyl)-		98-82-8	0.1 - 1 *
Hydroperoxide, 1-methyl-1-phenylethyl		80-15-9	1 - 5 *
Poly(oxy-1,2-ethanediyl), .alpha.-(1-oxo-9-octadecenyl)-.omega.ga.-hydroxy-, (Z)-		9004-96-0	10 - 30 *
Polyethylene glycol methacrylate		25852-47-5	45 - 70 *
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 symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.
Skin contact	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).
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. Never give anything by mouth if victim is unconscious or is convulsing. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	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.
Indication of immediate medical attention and special treatment needed	Symptoms may be delayed.
General information	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.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide.
Unsuitable extinguishing media	Not available.
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. 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.
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
Titanium oxide (CAS 13463-67-7)	TWA	10 mg/m3

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

Components	Type	Value
Benzene, (1-methylethyl)- (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
Benzene, (1-methylethyl)- (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
Benzene, (1-methylethyl)- (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
Benzene, (1-methylethyl)- (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
Benzene, (1-methylethyl)- (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 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.
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	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.

9. Physical and chemical properties

Appearance	Liquid
Physical state	Liquid.
Form	Liquid.
Colour	Blue
Odour	Mild
Odour threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	> 149 °C (> 300.2 °F)
Flash point	> 93.0 °C (> 199.4 °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	Not available.
Vapour density	> 1 (Air = 1)
Relative density	1 - 1.15
Solubility(ies)	
Solubility (Water)	Not available.
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.

10. Stability and reactivity

Reactivity	May react with incompatible materials.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerisation does not occur.
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	Not available.
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 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 May cause respiratory irritation.

Components	Species	Test results
Benzene, (1-methylethyl)- (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 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
Poly(oxy-1,2-ethanediyl), .alpha.-(1-oxo-9-octadecenyl)-.omega.-hydroxy-, (Z)- (CAS 9004-96-0)		
Acute		
<i>Dermal</i>		
LC50	Rabbit	> 500 mg/kg, 24 Hours, Spectrum Chemicals
<i>Inhalation</i>		
LC50	Not available	
<i>Oral</i>		
LD50	Mouse	> 2500 mg/kg, Spectrum Chemicals
Polyethylene glycol methacrylate (CAS 25852-47-5)		
Acute		
<i>Dermal</i>		
LD50	Not available	
<i>Inhalation</i>		
LC50	Not available	

Components	Species	Test results
<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 > 3.6 mg/L, 4 Hours, 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 Rat	> 5000 mg/kg, ECHA > 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	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		
Benzene, (1-methylethyl)- (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	Prolonged exposure may cause chronic effects.	
Further information	Not available.	

12. Ecological information

Ecotoxicity See below

Ecotoxicological data

Components		Species	Test results
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
Aquatic			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	2.7 mg/L, 96 hours
Titanium oxide (CAS 13463-67-7)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	> 1000 mg/L, 48 hours
Fish	LC50	Mummichog (Fundulus heteroclitus)	> 1000 mg/L, 96 hours
Persistence and degradability	No data is available on the degradability of this product.		
Bioaccumulative potential			
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	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	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.
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.	
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

Country(s) or region

Canada

Inventory Name

Non-Domestic Substances List (NDSL)

On Inventory (Yes/No)*

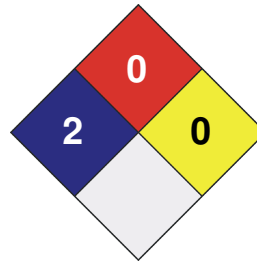
No

*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		0
PHYSICAL HAZARD		0
PERSONAL PROTECTION		X



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01

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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