SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: US OSHA Hazard Communication Standard (29 CFR 1910.1200) and Canada WHMIS 2015 which includes the amended Hazardous Products Act (HPA) and the Hazardous Products Regulation (HPR)

Revision Date 21-Jan-2025 **Version** 1

1. Identification

Product identifier

Product Name MEDIUM STRENGTH THREADLOCKER BLUE GEL, 5 GR

Other means of identification

Product Code PX24005

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Adhesive

Restrictions on use No information available

Details of the supplier of the safety data sheet

Manufacturer Address
ITW Permatex, Inc.
6875 Parkland Blvd.
Solon, Ohio 44139 USA
Telephone: 1-87-Permatex
(866) 732-9502

May Also Be Distributed by:
ITW Permatex Canada
101-2360 Bristol Circle
Oakville, ON Canada L6H 6M5
Telephone: (800) 924-6994

E-mail address mail@permatex.com

Emergency telephone number

24 Hour Emergency Phone Number Chem-Tel: 800-255-3924
International Emergency:
00+1+ 813-248-0585
Contract Number: MIS0003453

24-hour emergency phone number No information available

2. Hazard(s) identification

Classification

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Carcinogenicity	Category 1B
Specific target organ toxicity (repeated exposure)	Category 2

Label elements

Contains CUMENE HYDROPEROXIDE; CUMENE; TITANIUM DIOXIDE

Danger

Hazard statements
Causes skin irritation.
Causes serious eye irritation.
May cause cancer.
May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements - Prevention
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Use personal protective equipment as required.
Wash face, hands and any exposed skin thoroughly after handling.
Do not breathe dust, fume, gas, mist, vapors and spray.
Precautionary Statements - Response
IF exposed or concerned: Get medical advice/attention.
Eyes
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 advice and attention.
Skin
IF ON SKIN: Wash with plenty of soap and water.
If skin irritation occurs: Get medical advice and attention.
Take off contaminated clothing and wash before reuse.

Precautionary Statements - Storage
Store locked up.
Precautionary Statements - Disposal
Dispose of contents and container to an approved waste disposal plant.

9.95 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.
13.4 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.
37.95728 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).
37.95728 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).
35.25728 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Other Information
Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

Chemical name	CAS No.	Weight-%	**Hazardous Material Information Review Act registry number (HMIRA registry #)**	**Date HMIRA filed and date exemption granted (if applicable)**
CUMENE HYDROPEROXIDE	80-15-9	1-5%	-	-
PROPYLENE GLYCOL	57-55-6	1-5%	-	-

TITANIUM DIOXIDE	13463-67-7	0.1-1%	-	-
TETRASODIUM EDTA	64-02-8	0.1-1%	-	-
CUMENE	98-82-8	0.1-1%	-	-

4. First-aid measures

Description of first aid measures

General advice IF exposed or concerned: Get medical advice/attention. Show this safety data sheet to the doctor in attendance.

Inhalation Remove to fresh air. Get medical attention immediately if symptoms occur.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.

Skin contact Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician.

Self-protection of the first aider Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

Most important symptoms and effects, both acute and delayed

Symptoms May cause redness and tearing of the eyes. Burning sensation.

Effects of Exposure May cause cancer. May cause damage to organs through prolonged or repeated exposure.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the chemical No information available.

Explosion data
Sensitivity to mechanical impact None.
Sensitivity to static discharge None.

Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required.

Other information Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

8. Exposure controls/personal protection

Control parameters
Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
TITANIUM DIOXIDE 13463-67-7	TWA: 0.2 mg/m³ nanoscale respirable particulate matter TWA: 2.5 mg/m³ finescale respirable particulate matter	TWA: 15 mg/m³ total dust (vacated) TWA: 10 mg/m³ total dust	IDLH: 5000 mg/m³ TWA: 2.4 mg/m³ CIB 63 fine TWA: 0.3 mg/m³ CIB 63 ultrafine, including engineered nanoscale
CUMENE 98-82-8	TWA: 5 ppm	TWA: 50 ppm TWA: 245 mg/m³ (vacated) TWA: 50 ppm (vacated) TWA: 245 mg/m³ (vacated) Sk* Sk*	IDLH: 900 ppm TWA: 50 ppm TWA: 245 mg/m³

Chemical name	Alberta	British Columbia	Ontario	Quebec
PROPYLENE GLYCOL 57-55-6	-	-	TWA: 10 mg/m³ TWA: 50 ppm TWA: 155 mg/m³	-
TITANIUM DIOXIDE 13463-67-7	TWA: 10 mg/m³	TWA: 10 mg/m³ TWA: 3 mg/m³	TWA: 10 mg/m³	TWA: 10 mg/m³
CUMENE 98-82-8	TWA: 50 ppm TWA: 246 mg/m³	TWA: 25 ppm STEL: 75 ppm	TWA: 50 ppm	TWA: 5 ppm

Chemical name	Manitoba	New Brunswick	Newfoundland and Labrador	Nova Scotia
TITANIUM DIOXIDE	TWA: 0.2 mg/m³ TWA: 2.5 mg/m³	TWA: 10 mg/m³	TWA: 0.2 mg/m³ TWA: 2.5 mg/m³	TWA: 0.2 mg/m³ TWA: 2.5 mg/m³

Chemical name	Manitoba	New Brunswick	Newfoundland and Labrador	Nova Scotia
CUMENE	TWA: 5 ppm	TWA: 50 ppm	TWA: 5 ppm	TWA: 5 ppm

Chemical name	Nunavut	Prince Edward Island	Saskatchewan	Yukon
TITANIUM DIOXIDE	TWA: 10 mg/m³ STEL: 20 mg/m³	TWA: 0.2 mg/m³ TWA: 2.5 mg/m³	TWA: 10 mg/m³ STEL: 20 mg/m³	TWA: 30 mppcf TWA: 10 mg/m³ STEL: 20 mg/m³
CUMENE	TWA: 50 ppm STEL: 74 ppm	TWA: 5 ppm	TWA: 50 ppm STEL: 74 ppm	TWA: 50 ppm TWA: 245 mg/m³ STEL: 75 ppm STEL: 365 mg/m³ Sk*

Appropriate engineering controls

Engineering controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection If splashes are likely to occur, wear safety glasses with side-shields.

Hand protection Wear suitable gloves. Impervious gloves.

Skin and body protection Wear suitable protective clothing. Long sleeved clothing.

Respiratory protection Appropriate respiratory protection should be selected and used according to the chemical nature, hazards and use of this product and safety requirements of the local jurisdiction. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Paste / Gel Liquid
Appearance Blue
Color Blue
Odor Mild
Odor threshold No information available

Property	Values	Remarks • Method
pH	No data available	10% in deionized water
Melting point / freezing point	No data available	Estimated
Boiling point / boiling range	> 150 °C / 302 °F	
Flash point	> 95 °C / 203 °F	
Evaporation rate	Not applicable	Butyl acetate = 1
Flammability (solid, gas)	No data available	Flammable in the presence of the following materials or conditions: open flames, sparks and static

			discharge.
Flammability Limit in Air			None known
Upper flammability limit:	No data available		
Lower flammability limit:	No data available		
Vapor pressure	No Data Available		mmHg
Vapor density	No data available		Air = 1
Relative density	1.11 - 1.15		
Water solubility	No data available	Insoluble in water	
Solubility(ies)	No Data Available		None known
Partition coefficient	No Data Available		None known
Autoignition temperature	No data available		Estimated
Decomposition temperature	No data available		Remarks: Self-Accelerating decomposition temperature (SADT): 50 °C SADT-Self Accelerating Decomposition Temperature. Lowest temperature at which the tested package size will undergo a self-accelerating decomposition reaction.
Kinematic viscosity	No Data Available		Kinematic viscosity at 100 degrees C
Dynamic viscosity	No data available		Remarks: Self-Accelerating decomposition temperature (SADT): 50 °C SADT-Self Accelerating Decomposition Temperature. Lowest temperature at which the tested package size will undergo a self-accelerating decomposition reaction.

Other information

Explosive properties	No information available
Oxidizing properties	No information available
Softening point	No information available
Molecular weight	No information available
VOC content	4.73728
Density	No information available
Bulk density	No information available

10. Stability and reactivity

Reactivity	No information available.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	None known based on information supplied.
Incompatible materials	Strong acids. Strong bases. Strong oxidizing agents.
Hazardous decomposition products	None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation	Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.
Eye contact	Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.
Skin contact	Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components).
Ingestion	Specific test data for the substance or mixture is not available. Ingestion may cause

gastrointestinal irritation, nausea, vomiting and diarrhea.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Redness. May cause redness and tearing of the eyes.

Acute toxicity .

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 10,505.90 mg/kg
ATEmix (dermal) 13,233.80 mg/kg
ATEmix (inhalation-gas) 99,999.00 ppm
ATEmix (inhalation-vapor) 99,999.00 mg/l
ATEmix (inhalation-dust/mist) 12.00 mg/l

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Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
CUMENE HYDROPEROXIDE 80-15-9	= 382 mg/kg (Rat)	= 0.126 mL/kg (Rabbit)	= 220 ppm (Rat) 4 h
PROPYLENE GLYCOL 57-55-6	= 20 g/kg (Rat)	= 20800 mg/kg (Rabbit)	-
TITANIUM DIOXIDE 13463-67-7	> 2000 mg/kg (Rat)	-	> 5.09 mg/L (Rat) 4 h
TETRASODIUM EDTA 64-02-8	= 1658 mg/kg (Rat)	-	-
CUMENE 98-82-8	= 1400 mg/kg (Rat)	= 12300 µL/kg (Rabbit)	> 3577 ppm (Rat) 6 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Classification based on data available for ingredients. Causes skin irritation.

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes serious eye irritation.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity Contains a known or suspected carcinogen. Classification based on data available for ingredients. May cause cancer.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
TITANIUM DIOXIDE 13463-67-7	A3	Group 2B	-	X
CUMENE 98-82-8	A3	Group 2B	Reasonably Anticipated	X

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)
A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)
Group 2B - Possibly Carcinogenic to Humans
NTP (National Toxicology Program)
Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen
Occupational Safety and Health Administration of the US Department of Labor
X - Present

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard No information available.

12. Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
CUMENE HYDROPEROXIDE 80-15-9	-	LC50: =3.9mg/L (96h, Oncorhynchus mykiss)	-	-
PROPYLENE GLYCOL 57-55-6	EC50: =19000mg/L (96h, Pseudokirchneriella subcapitata)	LC50: =51600mg/L (96h, Oncorhynchus mykiss) LC50: 41 - 47mL/L (96h, Oncorhynchus mykiss) LC50: =51400mg/L (96h, Pimephales promelas) LC50: =710mg/L (96h, Pimephales promelas)	-	EC50: >1000mg/L (48h, Daphnia magna)
TETRASODIUM EDTA 64-02-8	-	LC50: =41mg/L (96h, Lepomis macrochirus) LC50: =59.8mg/L (96h, Pimephales promelas)	-	-
CUMENE 98-82-8	EC50: =2.6mg/L (72h, Pseudokirchneriella subcapitata)	LC50: 6.04 - 6.61mg/L (96h, Pimephales promelas) LC50: =4.8mg/L (96h, Oncorhynchus mykiss) LC50: =2.7mg/L (96h, Oncorhynchus mykiss) LC50: =5.1mg/L (96h, Poecilia reticulata)	-	EC50: =0.6mg/L (48h, Daphnia magna) EC50: 7.9 - 14.1mg/L (48h, Daphnia magna)

Persistence and degradability No information available.

Bioaccumulation

Component Information

Chemical name	Partition coefficient
CUMENE HYDROPEROXIDE 80-15-9	1.6
PROPYLENE GLYCOL	-1.07

57-55-6	
CUMENE 98-82-8	3.55

Other adverse effects No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

US EPA Waste Number Waste designations and classifications should be determined by the end user based on the application for which the product was used.

14. Transport information

DOT Not regulated

TDG Not regulated

MEX Not regulated

ICAO (air) Not regulated

IATA Not regulated

IMDG Not regulated

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories

TSCA	Natural
DSL/NDSL	Natural
EINECS/ELINCS	Natural
ENCS	Natural
IECSC	Natural
KECI	Natural
PICCS	Natural
AICS	Natural
NZIoC	Complies

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing Chemicals Inventory
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances
NZIoC - New Zealand Inventory of Chemicals

US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %
CUMENE HYDROPEROXIDE - 80-15-9	1.0
SACCHARIN - 81-07-2	1.0
CUMENE - 98-82-8	0.1

SARA 311/312 Hazard Categories
Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	Reportable Quantity (RQ)
CUMENE HYDROPEROXIDE 80-15-9	10 lb	-	RQ 10 lb final RQ RQ 4.54 kg final RQ
CUMENE 98-82-8	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65
This product contains the following Proposition 65 chemicals:

Chemical name	California Proposition 65
TITANIUM DIOXIDE - 13463-67-7	*Carcinogen (airborne, unbound particles of respirable size)
CUMENE - 98-82-8	Carcinogen

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
CUMENE HYDROPEROXIDE 80-15-9	X	X	X
PROPYLENE GLYCOL 57-55-6	X	-	X
SACCHARIN 81-07-2	X	X	X
TITANIUM DIOXIDE 13463-67-7	X	X	X

CUMENE 98-82-8	X	X	X
ACETOPHENONE 98-86-2	X	X	X
P-BENZOQUINONE 106-51-4	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA	**Health hazards** 2	**Flammability** 1	**Instability** 0	**Special hazards** -
HMIS	**Health hazards** 2 *	**Flammability** 1	**Physical hazards** 0	**Personal protection** X

Chronic Hazard Star Legend ** = Chronic Health Hazard*

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend
SVHC: Substances of Very High Concern for Authorization:
PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances
vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances
STOT: Specific Target Organ Toxicity
ATE: Acute Toxicity Estimate
LC50: 50% Lethal Concentration
LD50: 50% Lethal Dose

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
+	Sensitizers		

Key literature references and sources for data used to compile the SDS
Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
Environmental Protection Agency
Acute Exposure Guideline Level(s) (AEGL(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
National Institute of Technology and Evaluation (NITE)
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine’s PubMed database (NLM PUBMED)
U.S. National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

Revision Date 21-Jan-2025

Revision Note No information available.

Disclaimer

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 given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. 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.