



# 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 10-Jan-2025

Version 1

## 1. Identification

### Product identifier

**Product Name** MEDIUM STRENGTH THREADLOCKER BLUE 10 ML

### Other means of identification

**Product Code** 24210

**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



**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.

0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.  
0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.  
4.525 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).  
4.525 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).  
0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

**Other Information**

No information available.

### 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)
ETHYLENE GLYCOL	107-21-1	1-5%	-	-

CUMENE HYDROPEROXIDE	80-15-9	1-5%	-	-
TITANIUM DIOXIDE	13463-67-7	0.1-1%	-	-
CUMENE	98-82-8	0.1-1%	-	-

## 4. First-aid measures

### Description of first aid measures

<b>General advice</b>	IF exposed or concerned: Get medical advice/attention. Show this safety data sheet to the doctor in attendance.
<b>Inhalation</b>	Remove to fresh air. Get medical attention immediately if symptoms occur.
<b>Eye contact</b>	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.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician.
<b>Self-protection of the first aider</b>	Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

### Most important symptoms and effects, both acute and delayed

<b>Symptoms</b>	May cause redness and tearing of the eyes. Burning sensation.
<b>Effects of Exposure</b>	May cause cancer. May cause damage to organs through prolonged or repeated exposure.

### Indication of any immediate medical attention and special treatment needed

<b>Note to physicians</b>	Treat symptomatically.
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## 5. Fire-fighting measures

<b>Suitable Extinguishing Media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Small Fire</b>	In case of fire, use water spray, foam, dry chemical, or CO2.
<b>Large Fire</b>	In case of fire, use water spray, foam, dry chemical, or CO2.
<b>Unsuitable extinguishing media</b>	Do not scatter spilled material with high pressure water streams.
<b>Specific hazards arising from the chemical</b>	No information available.
<b>Hazardous combustion products</b>	No information available.
<b>Explosion data</b>	
<b>Sensitivity to mechanical impact</b>	None.
<b>Sensitivity to static discharge</b>	None.
<b>Special protective equipment and precautions for fire-fighters</b>	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
ETHYLENE GLYCOL 107-21-1	TWA: 25 ppm vapor fraction STEL: 50 ppm vapor fraction STEL: 10 mg/m <sup>3</sup> inhalable particulate matter, aerosol only	(vacated) Ceiling: 50 ppm (vacated) Ceiling: 125 mg/m <sup>3</sup>	-
TITANIUM DIOXIDE 13463-67-7	TWA: 0.2 mg/m <sup>3</sup> nanoscale respirable particulate matter TWA: 2.5 mg/m <sup>3</sup> finescale respirable particulate matter	TWA: 15 mg/m <sup>3</sup> total dust (vacated) TWA: 10 mg/m <sup>3</sup> total dust	IDLH: 5000 mg/m <sup>3</sup> TWA: 2.4 mg/m <sup>3</sup> CIB 63 fine TWA: 0.3 mg/m <sup>3</sup> CIB 63 ultrafine, including engineered nanoscale
CUMENE 98-82-8	TWA: 5 ppm	TWA: 50 ppm TWA: 245 mg/m <sup>3</sup> (vacated) TWA: 50 ppm (vacated) TWA: 245 mg/m <sup>3</sup> (vacated) Sk* Sk*	IDLH: 900 ppm TWA: 50 ppm TWA: 245 mg/m <sup>3</sup>

Chemical name	Alberta	British Columbia	Ontario	Quebec
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ETHYLENE GLYCOL 107-21-1	Ceiling: 100 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup> Ceiling: 100 mg/m <sup>3</sup> Ceiling: 50 ppm	TWA: 25 ppm STEL: 50 ppm STEL: 10 mg/m <sup>3</sup>	Ceiling: 50 ppm Ceiling: 127 mg/m <sup>3</sup>
TITANIUM DIOXIDE 13463-67-7	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> TWA: 3 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>
CUMENE 98-82-8	TWA: 50 ppm TWA: 246 mg/m <sup>3</sup>	TWA: 25 ppm STEL: 75 ppm	TWA: 50 ppm	TWA: 5 ppm

Chemical name	Manitoba	New Brunswick	Newfoundland and Labrador	Nova Scotia
ETHYLENE GLYCOL	TWA: 25 ppm STEL: 50 ppm STEL: 10 mg/m <sup>3</sup>	Ceiling: 100 mg/m <sup>3</sup>	TWA: 25 ppm STEL: 50 ppm STEL: 10 mg/m <sup>3</sup>	TWA: 25 ppm STEL: 50 ppm STEL: 10 mg/m <sup>3</sup>
TITANIUM DIOXIDE	TWA: 0.2 mg/m <sup>3</sup> TWA: 2.5 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 0.2 mg/m <sup>3</sup> TWA: 2.5 mg/m <sup>3</sup>	TWA: 0.2 mg/m <sup>3</sup> TWA: 2.5 mg/m <sup>3</sup>
CUMENE	TWA: 5 ppm	TWA: 50 ppm	TWA: 5 ppm	TWA: 5 ppm

Chemical name	Nunavut	Prince Edward Island	Saskatchewan	Yukon
ETHYLENE GLYCOL	Ceiling: 100 mg/m <sup>3</sup>	TWA: 25 ppm STEL: 50 ppm STEL: 10 mg/m <sup>3</sup>	Ceiling: 100 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> TWA: 100 ppm TWA: 250 mg/m <sup>3</sup> STEL: 10 ppm STEL: 20 mg/m <sup>3</sup> STEL: 125 ppm STEL: 325 mg/m <sup>3</sup>
TITANIUM DIOXIDE	TWA: 10 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup>	TWA: 0.2 mg/m <sup>3</sup> TWA: 2.5 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup>	TWA: 30 mppcf TWA: 10 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup>
CUMENE	TWA: 50 ppm STEL: 74 ppm	TWA: 5 ppm	TWA: 50 ppm STEL: 74 ppm	TWA: 50 ppm TWA: 245 mg/m <sup>3</sup> STEL: 75 ppm STEL: 365 mg/m <sup>3</sup> 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.
Thermal hazards	No information available.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

Physical state	Liquid
Appearance	No information available
Color	Blue
Odor	No information available
Odor threshold	No information available

Property	Values	Remarks • Method
pH	No data available	Estimated
Melting point / freezing point	No data available	
Boiling point / boiling range	> 200 °C / 392 °F	
Flash point	131 °C / 267.8 °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. None known
Flammability Limit in Air		
Upper flammability limit:	No data available	
Lower flammability limit:	No data available	
Vapor pressure	No Data Available	
Vapor density	No data available	
Relative density	1.01	
Water solubility	No data available	Immiscible 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 at 100 degrees C
Kinematic viscosity	No Data Available	
Dynamic viscosity	1,100 mPas @20°C (68°F)	
Other information		
Explosive properties	No information available	
Oxidizing properties	No information available	
Softening point	No information available	
Molecular weight	No information available	
VOC content	No information available	
Density	No information available	
Bulk density	No information available	

## 10. Stability and reactivity

Reactivity	No information available.
Chemical stability	Stable under normal conditions.

<b>Possibility of hazardous reactions</b>	None under normal processing.
<b>Hazardous polymerization</b>	No information available.
<b>Conditions to avoid</b>	None known based on information supplied.
<b>Incompatible materials</b>	Strong acids. Strong bases. Strong oxidizing agents.
<b>Hazardous decomposition products</b>	None known based on information supplied.

## 11. Toxicological information

### Information on likely routes of exposure

#### Product Information

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

<b>Symptoms</b>	Redness. May cause redness and tearing of the eyes.
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### Acute toxicity

#### Numerical measures of toxicity

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

<b>ATEmix (oral)</b>	9,707.80 mg/kg
<b>ATEmix (dermal)</b>	48,152.00 mg/kg
<b>ATEmix (inhalation-gas)</b>	99,999.00 ppm
<b>ATEmix (inhalation-vapor)</b>	99,999.0000 mg/l
<b>ATEmix (inhalation-dust/mist)</b>	21.238 mg/l

0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity  
0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity  
4.525 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)  
4.525 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)  
0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

#### Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
ETHYLENE GLYCOL 107-21-1	= 4700 mg/kg ( Rat )	= 10600 mg/kg ( Rat )	> 2.5 mg/L ( Rat ) 6 h
CUMENE HYDROPEROXIDE 80-15-9	= 382 mg/kg ( Rat )	= 0.126 mL/kg ( Rabbit )	= 220 ppm ( Rat ) 4 h
TITANIUM DIOXIDE 13463-67-7	> 2000 mg/kg ( Rat )	-	> 5.09 mg/L ( Rat ) 4 h
CUMENE	= 1400 mg/kg ( Rat )	= 12300 µL/kg ( Rabbit )	> 3577 ppm ( Rat ) 6 h

98-82-8			
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**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

<b>Skin corrosion/irritation</b>	Classification based on data available for ingredients. Causes skin irritation.
<b>Serious eye damage/eye irritation</b>	Classification based on data available for ingredients. Causes serious eye irritation.
<b>Respiratory or skin sensitization</b>	No information available.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	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

<b>Reproductive toxicity</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	May cause damage to organs through prolonged or repeated exposure.
<b>Aspiration hazard</b>	No information available.

**12. Ecological information****Ecotoxicity**

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
ETHYLENE GLYCOL 107-21-1	EC50: 6500 - 13000mg/L (96h, Pseudokirchneriella subcapitata)	LC50: =41000mg/L (96h, Oncorhynchus mykiss) LC50: 14 - 18mL/L (96h, Oncorhynchus mykiss)	-	EC50: =46300mg/L (48h, Daphnia magna)



		LC50: =27540mg/L (96h, <i>Lepomis macrochirus</i> ) LC50: =40761mg/L (96h, <i>Oncorhynchus mykiss</i> ) LC50: 40000 - 60000mg/L (96h, <i>Pimephales promelas</i> ) LC50: =16000mg/L (96h, <i>Poecilia reticulata</i> )		
CUMENE HYDROPEROXIDE 80-15-9	-	LC50: =3.9mg/L (96h, <i>Oncorhynchus mykiss</i> )	-	-
CUMENE 98-82-8	EC50: =2.6mg/L (72h, <i>Pseudokirchneriella subcapitata</i> )	LC50: 6.04 - 6.61mg/L (96h, <i>Pimephales promelas</i> ) LC50: =4.8mg/L (96h, <i>Oncorhynchus mykiss</i> ) LC50: =2.7mg/L (96h, <i>Oncorhynchus mykiss</i> ) LC50: =5.1mg/L (96h, <i>Poecilia reticulata</i> )	-	EC50: =0.6mg/L (48h, <i>Daphnia magna</i> ) EC50: 7.9 - 14.1mg/L (48h, <i>Daphnia magna</i> )

**Persistence and degradability** No information available.

#### Bioaccumulation

##### Component Information

Chemical name	Partition coefficient
ETHYLENE GLYCOL 107-21-1	-1.36
CUMENE HYDROPEROXIDE 80-15-9	1.6
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

<u>TDG</u>	Not regulated
<u>MEX</u>	Not regulated
<u>ICAO (air)</u>	Not regulated
<u>IATA</u>	Not regulated
<u>IMDG</u>	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	Complies
DSL/NDL	Complies
EINECS/ELINCS	Does not comply
ENCS	Does not comply
IECSC	Complies
KECI	Complies
PICCS	Complies
AICS	Complies
NZIoC	Complies

#### **Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDL** - 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

**KECI** - 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 %
ETHYLENE GLYCOL - 107-21-1	1.0
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)
ETHYLENE GLYCOL 107-21-1	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final 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
ETHYLENE GLYCOL - 107-21-1	Developmental
TITANIUM DIOXIDE - 13463-67-7	*Carcinogen (airborne, unbound particles of respirable size)
CUMENE - 98-82-8	Carcinogen

\*The asterisked chemical(s) listed are not subject to Proposition 65 because they are not airborne in the finished product

**U.S. State Right-to-Know Regulations**

Chemical name	New Jersey	Massachusetts	Pennsylvania
ETHYLENE GLYCOL 107-21-1	X	X	X
CUMENE HYDROPEROXIDE 80-15-9	X	X	X
SACCHARIN 81-07-2	X	X	X
PROPYLENE GLYCOL 57-55-6	X	-	X
TITANIUM DIOXIDE 13463-67-7	X	X	X
CUMENE 98-82-8	X	X	X
1,4-NAPHTHOQUINONE 130-15-4	X	X	X
2-BUTOXYETHANOL 111-76-2	X	X	X

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

**16. Other information**

<b>NFPA</b>	<b>Health hazards</b> 2	<b>Flammability</b> 1	<b>Instability</b> 0	<b>Special hazards</b> -
<b>HMIS</b>	<b>Health hazards</b> 2 *	<b>Flammability</b> 1	<b>Physical hazards</b> 0	<b>Personal protection</b> 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) (AELG(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** 10-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.