



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
which includes the amended Hazardous Products Act (HPA) and the Hazardous Products
Regulation (HPR)

Revision Date 02-Jun-2025

Version 1

1. Identification

Product identifier

Product Name HIGH PERFORMANCE THREAD SEALANT 50ML

Other means of identification

Product Code 56521

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Sealant

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.
Wear protective gloves, protective clothing, eye protection and face protection.
Wash face, hands and any exposed skin thoroughly after handling.
Do not breathe dust.

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention.
Specific treatment (see supplemental first aid instructions on this label).

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 water and soap.
If skin irritation occurs: Get medical advice and attention.
Take off contaminated clothing and wash it before reuse.

Precautionary Statements - Storage

Store locked up.

Precautionary Statements - Disposal

Dispose of contents and container in accordance with local, regional, national, and international regulations as applicable.

5.076 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.
5.076 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.
6.86748 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).
6.86748 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).
5.076 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Other Information

Harmful to aquatic life.

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)
TITANIUM DIOXIDE	13463-67-7	1-5%	-	-

CUMENE HYDROPEROXIDE	80-15-9	1-5%	-	-
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	Erythema (skin redness). 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.
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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
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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 Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.

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/m ³ nanoscale respirable particulate matter TWA: 2.5 mg/m ³ finescale respirable particulate matter	TWA: 15 mg/m ³ total dust (vacated) TWA: 10 mg/m ³ total dust	TWA: 2.4 mg/m ³ ; CIB 63 fine TWA: 0.3 mg/m ³ ; CIB 63 ultrafine, including engineered nanoscale IDLH: 5000 mg/m ³
CUMENE 98-82-8	TWA: 5 ppm	TWA: 50 ppm TWA: 245 mg/m ³ (vacated) TWA: 50 ppm (vacated) TWA: 245 mg/m ³ dSk Sdv	TWA: 50 ppm; TWA: 245 mg/m ³ ; IDLH: 900 ppm

Chemical name	Alberta	British Columbia	Ontario	Quebec
TITANIUM DIOXIDE 13463-67-7	TWA: 10 mg/m ³ ;	TWA: 10 mg/m ³ ; total dust TWA: 3 mg/m ³ ; respirable fraction	TWA: 10 mg/m ³ ;	TWAEV: 10 mg/m ³ ; total dust
CUMENE 98-82-8	TWA: 50 ppm; TWA: 246 mg/m ³ ;	TWA: 5 ppm; STEL: 75 ppm;	TWA: 50 ppm;	TWAEV: 5 ppm;

Chemical name	Manitoba	New Brunswick	Newfoundland and Labrador	Nova Scotia
TITANIUM DIOXIDE	TWA: 0.2 mg/m ³ ; nanoscale respirable particulate matter TWA: 2.5 mg/m ³ ;	TWA: 10 mg/m ³ ;	TWA: 0.2 mg/m ³ ; nanoscale respirable particulate matter TWA: 2.5 mg/m ³ ;	TWA: 0.2 mg/m ³ ; nanoscale respirable particulate matter TWA: 2.5 mg/m ³ ;

Chemical name	Manitoba	New Brunswick	Newfoundland and Labrador	Nova Scotia
	finescale respirable particulate matter		finescale respirable particulate matter	finescale respirable particulate matter
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/m ³ ; STEL: 20 mg/m ³ ;	TWA: 0.2 mg/m ³ ; nanoscale respirable particulate matter TWA: 2.5 mg/m ³ ; finescale respirable particulate matter	TWA: 10 mg/m ³ ; STEL: 20 mg/m ³ ;	TWA: 30 mppcf; TWA: 10 mg/m ³ ; STEL: 20 mg/m ³ ;
CUMENE	TWA: 50 ppm; STEL: 74 ppm;	TWA: 5 ppm;	TWA: 50 ppm; STEL: 74 ppm;	TWA: 50 ppm; TWA: 245 mg/m ³ ; STEL: 75 ppm; STEL: 365 mg/m ³ ; Sk

Appropriate engineering controls

Engineering controls Showers
 Eyewash stations
 Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Hand protection Wear suitable gloves.

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

Respiratory protection Use appropriate respiratory protection.

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 Liquid
Appearance No information available
Color White
Odor No information available
Odor threshold No information available

Property

pH No data available
Melting point / freezing point No data available
Boiling point / boiling range > 150 °C / 302 °F
Flash point > 95 °C / 203 °F
Evaporation rate Not applicable

Remarks • Method

Tag Closed Cup

Flammability (solid, gas)	No data available	
Flammability Limit in Air		
Upper flammability limit:	No data available	
Lower flammability limit:	No data available	
Vapor pressure	No data available	
Vapor density	>1	Air = 1
Relative density	1.05-1.15	
Water solubility	Insoluble	
Solubility(ies)	No data available	
Partition coefficient	No data available	
Autoignition temperature	No data available	
Decomposition temperature	No data available	
Kinematic viscosity	No data available	
Dynamic viscosity	No data available	
Particle characteristics		
Particle Size	No data available	
Particle Size Distribution	No data available	
<u>Other information</u>		
Explosive properties	No information available	
Oxidizing properties	No information available	
Softening point	No information available	
Molecular weight	No information available	
VOC content	<3%	
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.
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Acute toxicity

Numerical measures of toxicity

The following ATE values have been calculated for the mixture

ATEmix (oral)	21,323.20 mg/kg
ATEmix (dermal)	61,401.70 mg/kg
ATEmix (inhalation-gas)	99,999.00 ppm
ATEmix (inhalation-vapor)	99,999.00 mg/l
ATEmix (inhalation-dust/mist)	27.966 mg/l

- 5.076 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
- 5.076 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
- 6.86748 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
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Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
TITANIUM DIOXIDE 13463-67-7	> 2000 mg/kg (Rat)	-	> 5.09 mg/L (Rat) 4 h
CUMENE HYDROPEROXIDE 80-15-9	= 382 mg/kg (Rat)	= 0.126 mL/kg (Rabbit)	= 220 ppm (Rat) 4 h
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 - Confirmed Animal Carcinogen with Unknown Relevance to Humans	Group 2B - Possibly carcinogenic to humans	-	Present
CUMENE 98-82-8	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans	Group 2B - Possibly carcinogenic to humans	Reasonably Anticipated To Be A Human Carcinogen	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.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
CUMENE HYDROPEROXIDE 80-15-9	-	LC50: =3.9mg/L (96h, Oncorhynchus mykiss)	-	-
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
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	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Not determined
ENCS	Complies
IECSC	Complies
KECI	Complies
PICCS	Not determined
AICS	Not determined
NZIoC	Not Determined

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 / kg (final RQ)	-	RQ 10 lb final RQ RQ 4.54 kg final RQ
CUMENE 98-82-8	5000 lb / kg (final RQ)	-	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

*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
Poly(tetrafluoroethylene) 9002-84-0	-	-	X
TITANIUM DIOXIDE 13463-67-7	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
CUMENE 98-82-8	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 Ceiling +	TWA (time-weighted average) Maximum limit value Sensitizers	STEL *	STEL (Short Term Exposure Limit) Skin designation
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Key literature references and sources for data used to compile the SDS

U.S. Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
U.S. 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)
Japan 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)
International Organization for Economic Co-operation and Development (OECD) Environment, Health, and Safety Publications
International Organization for Economic Co-operation and Development (OECD) High Production Volume Chemicals Program
International Organization for Economic Co-operation and Development (OECD) Screening Information Data Set
United Nations World Health Organization (WHO)

Revision Date 02-Jun-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.