Permatex.

SAFETY DATA SHEET

Revision Date 03-Feb-2015 Version 1

1. IDENTIFICATION

Product identifier

Product Name HIGH TEMPERATURE THREAD SEALANT 50ML

Other means of identification

Product Code 59235 Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Sealant

Uses advised against No information available

Details of the supplier of the safety data sheet

<u>Manufacturer Address</u> <u>Distributor</u>

ITW Permatex Canada
10 Columbus Blvd. 35 Brownridge Road, Unit 1
Hartford, CT 06106 USA Halton Hills, ON Canada L7G 0C6

Telephone: (800) 924-6994

Company Phone Number 1-87-Permatex

(877) 376-2839

24 Hour Emergency Phone Number Chem-Tel: 800-255-3924

International Emergency: 00+1+ 813-248-0585

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

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

Label elements

Emergency Overview

Warning

Causes skin irritation

Causes serious eye irritation Suspected of causing cancer

May cause damage to organs through prolonged or repeated exposure



Appearance White Physical state Paste Odor Mild

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

Wear eye/face protection

Do not breathe dust/fume/gas/mist/vapors/spray

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

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/attention

IF ON SKIN: Wash with plenty of soap and water

If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing and wash before reuse

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

Not applicable.

Unknown acute toxicity

73.871% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

| Chemical Name | CAS No | Weight-% | Trade Secret |
|------------------------------|------------|----------|--------------|
| POLYGLYCOL DIMETHACRYLATE | 25852-47-5 | 10 - 30 | * |
| SILICA, MICA | 12001-26-2 | 10 - 30 | * |
| POLYETHYLENE GLYCOL ESTER | 18268-70-7 | 5 - 10 | * |
| OCTANOL | 111-87-5 | 5 - 10 | * |
| POLYTETRAFLUOROETHYLENE | 9002-84-0 | 3 - 7 | * |
| TITANIUM DIOXIDE | 13463-67-7 | 1 - 5 | * |
| PROPYLENE GLYCOL | 57-55-6 | 1 - 5 | * |
| SACCHARIN | 81-07-2 | 1 - 5 | * |
| DIMETHYLBENZYL HYDROPEROXIDE | 80-15-9 | 1 - 5 | * |

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

50ML

Description of first aid measures

General advice Get medical advice/attention if you feel unwell.

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

advice/attention.

Skin contact IF ON SKIN:. Wash skin with soap and water. If skin irritation persists, call a physician.

Wash contaminated clothing before reuse.

Inhalation IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for

breathing. If symptoms persist, call a physician.

Ingestion IF SWALLOWED. Do NOT induce vomiting. Never give anything by mouth to an

unconscious person.

Self-protection of the first aiderUse personal protective equipment as required. Avoid contact with skin, eyes or clothing.

Most important symptoms and effects, both acute and delayed

Symptoms See section 2 for more information.

Indication of any immediate medical attention and special treatment needed

Note to physiciansTreat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide (CO2), Dry chemical, Foam

Unsuitable extinguishing media

None.

Specific hazards arising from the chemical

None in particular.

Explosion data

Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation, especially in confined areas. Avoid contact with eyes and skin.

Use personal protective equipment as required.

Environmental precautions

Environmental precautionsDo not flush into surface water or sanitary sewer system. See Section 12 for additional

ecological information.

Methods and material for containment and cleaning up

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

Methods for cleaning up Ensure adequate ventilation. Soak up with inert absorbent material. Sweep up and shovel

into suitable containers for disposal.

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 breathing

vapors or mists. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling.

Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities

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

Incompatible materials Strong oxidizing agents. Amines.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|------------------|----------------------------------|------------------------------------|------------------------------|
| SILICA, MICA | TWA: 3 mg/m³ respirable fraction | (vacated) TWA: 3 mg/m³ respirable | IDLH: 1500 mg/m ³ |
| 12001-26-2 | | dust <1% Crystalline silica | TWA: 3 mg/m³ containing <1% |
| | | TWA: 20 mppcf <1% Crystalline | Quartz respirable dust |
| | | silica | |
| TITANIUM DIOXIDE | TWA: 10 mg/m ³ | TWA: 15 mg/m³ total dust | IDLH: 5000 mg/m ³ |
| 13463-67-7 | | (vacated) TWA: 10 mg/m3 total dust | _ |

NIOSH IDLH Immediately Dangerous to Life or Health

Other Information Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962

(11th Cir., 1992).

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).

Skin and body protection Wear protective gloves and protective clothing.

appropriate.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Paste Appearance White

Air = 1

Odor Mild

Odor threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH Does not apply

Melting point / freezing pointNo information availableBoiling point / boiling range> 149 °C / 300 °FFlash point> 93 °C / > 199 °FEvaporation rateNo information availableFlammability (solid, gas)No information available

Flammability Limit in Air

Upper flammability limit:

Lower flammability limit:

No information available

No information available

Vapor pressure n/d Vapor density >1

Relative density 1.16-1.26 Water solubility Insoluble

No information available Solubility in other solvents Partition coefficient No information available No information available **Autoignition temperature Decomposition temperature** No information available No information available Kinematic viscosity No information available **Dynamic viscosity Explosive properties** No information available No information available **Oxidizing properties**

Other Information

Softening point No information available Molecular weight No information available

VOC Content (%) 2.8%; 33.9 g/L

DensityNo information availableBulk densityNo information available

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Excessive heat.

Incompatible materials

Strong oxidizing agents, Amines

Hazardous Decomposition Products

Carbon oxides

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation May be harmful if inhaled.

Eye contact May cause redness and tearing of the eyes.

Skin contact May cause skin irritation and/or dermatitis.

Ingestion Ingestion may cause irritation to mucous membranes.

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|--|---------------------|--------------------------|---------------------|
| POLYETHYLENE GLYCOL ESTER 18268-70-7 | = 18 g/kg(Rat) | > 20 mL/kg (Rabbit) | - |
| OCTANOL 111-87-5 | > 3200 mg/kg (Rat) | > 5000 mg/kg (Rabbit) | - |
| TITANIUM DIOXIDE 13463-67-7 | > 10000 mg/kg (Rat) | - | - |
| PROPYLENE GLYCOL 57-55-6 | = 20000 mg/kg (Rat) | = 20800 mg/kg(Rabbit) | - |
| DIMETHYLBENZYL HYDROPEROXIDE 80-15-9 | = 382 mg/kg(Rat) | = 0.126 mL/kg (Rabbit) | = 220 ppm (Rat) 4 h |

Information on toxicological effects

Symptoms No information available.

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

Serious eye damage/eye irritation
Sensitization
Germ cell mutagenicity

Risk of serious damage to eyes.
No information available.
No information available.

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

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|--|-------|----------|-----|------|
| POLYTETRAFLUOROETHY LENE 9002-84-0 | - | Group 3 | - | - |
| TITANIUM DIOXIDE 13463-67-7 | - | Group 2B | - | Х |
| SACCHARIN 81-07-2 | - | Group 3 | - | - |

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

Not classifiable as a human carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Target Organ Effects Lungs, Respiratory system.

Numerical measures of toxicity - Product Information

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

ATEmix (oral) 3936 mg/kg ATEmix (dermal) 7529 mg/kg ATEmix (inhalation-dust/mist) 13.1 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

None known

85.671% of the mixture consists of components(s) of unknown hazards to the aquatic environment

| Chemical Name | Algae/aquatic plants | Fish | Crustacea |
|---------------|----------------------------------|---------------------------------|----------------------------------|
| OCTANOL | 14: 48 h Desmodesmus subspicatus | 11.4 - 12.9: 96 h Pimephales | 15 - 26: 24 h Daphnia magna mg/L |
| 111-87-5 | mg/L EC50 static | promelas mg/L LC50 flow-through | EC50 |
| | | 17.68: 96 h Oncorhynchus mykiss | |
| | | mg/L LC50 static | |

| PROPYLENE GLYCOL 57-55-6 | 19000: 96 h Pseudokirchneriella subcapitata mg/L EC50 | 51600: 96 h Oncorhynchus mykiss mg/L LC50 static 41 - 47: 96 h Oncorhynchus mykiss mL/L LC50 static 51400: 96 h Pimephales promelas mg/L LC50 static 710: 96 h Pimephales promelas mg/L LC50 | 1000: 48 h Daphnia magna mg/L EC50 Static 10000: 24 h Daphnia magna mg/L EC50 |
|--|--|---|---|
| SACCHARIN 81-07-2 | - | 18300: 96 h Pimephales promelas mg/L LC50 | • |
| DIMETHYLBENZYL HYDROPEROXIDE 80-15-9 | - | 3.9: 96 h Oncorhynchus mykiss mg/L LC50 static | 7: 24 h Daphnia magna mg/L EC50 |

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility

No information available.

| Chemical Name | Partition coefficient |
|---------------|-----------------------|
| OCTANOL | 3.15 |
| 111-87-5 | |

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastesDisposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated packaging Do not reuse container.

US EPA Waste Number Not applicable

| Chemical Name | RCRA | RCRA - Basis for Listing | RCRA - D Series Wastes | RCRA - U Series Wastes |
|--|----------|--------------------------|------------------------|------------------------|
| DIMETHYLBENZYL HYDROPEROXIDE 80-15-9 | <u>-</u> | - | - | U096 |

This product contains one or more substances that are listed with the State of California as a hazardous waste.

| Chemical Name | California Hazardous Waste Status |
|------------------------------|-----------------------------------|
| DIMETHYLBENZYL HYDROPEROXIDE | Toxic |
| 80-15-9 | Ignitable |

14. TRANSPORT INFORMATION

DOT

Proper shipping name Not regulated

TDG

Proper shipping name Not regulated

ICAO (air)

Proper shipping name Not regulated

IATA

Proper shipping name Not regulated

IMDG

Proper shipping name Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA Does not comply **DSL/NDSL** Complies **EINECS/ELINCS** Does not comply Does not comply **ENCS IECSC** Complies **KECL** Complies Does not comply **PICCS AICS** 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 and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

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 % |
|--|-------------------------------|
| DIMETHYLBENZYL HYDROPEROXIDE - 80-15-9 | 1.0 |
| SACCHARIN - 81-07-2 | 1.0 |

SARA 311/312 Hazard Categories

| Acute health hazard | Yes |
|-----------------------------------|-----|
| Chronic Health Hazard | Yes |
| Fire hazard | No |
| Sudden release of pressure hazard | No |
| Reactive Hazard | No |

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 | CERCLA/SARA RQ | Reportable Quantity (RQ) |
|----------------|--------------------------|----------------|--------------------------|
| DIMETHYLBENZYL | 10 lb | - | RQ 10 lb final RQ |
| HYDROPEROXIDE | | | RQ 4.54 kg final RQ |
| 80-15-9 | | | _ |

US State Regulations

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California Proposition 65

This product contains the following Proposition 65 chemicals

| Chemical Name | California Proposition 65 | |
|-------------------------------|---------------------------|--|
| TITANIUM DIOXIDE - 13463-67-7 | Carcinogen | |

U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|--|------------|---------------|--------------|
| SILICA, MICA 12001-26-2 | X | X | X |
| TITANIUM DIOXIDE 13463-67-7 | X | X | X |
| PROPYLENE GLYCOL 57-55-6 | X | - | X |
| DIMETHYLBENZYL HYDROPEROXIDE 80-15-9 | Х | Х | Х |
| SACCHARIN 81-07-2 | X | X | X |
| WATER 7732-18-5 | - | - | X |

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

NFPA Health hazards 2 Flammability 1 Instability 0 -

Health hazards 2 Flammability 1 Physical hazards 0 Personal protection B

NFPA (National Fire Protection Association) HMIS (Hazardous Material Information System)

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Disclaimer

The information provided in this Material 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.

End of Safety Data Sheet