



# SAFETY DATA SHEET

Revision Date 18-Mar-2020

Version 7

## 1. IDENTIFICATION

### Product identifier

**Product Name** VERSACHEM TITANIUM EPOXY SYSTEM (RESIN)

### Other means of identification

**Product Code** 47909

### Recommended use of the chemical and restrictions on use

**Recommended Use** (Epoxy resin)

**Uses advised against** No information available

### Details of the supplier of the safety data sheet

#### Manufacturer Address

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

#### 24-hour emergency phone number

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

#### 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

## 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
Skin sensitization	Category 1

### Label elements

#### **Emergency Overview**

#### **Signal word**

**Warning**

Causes skin irritation  
Causes serious eye irritation  
May cause an allergic skin reaction



**Appearance** Gray

**Physical state** Viscous liquid

**Odor** Mild

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Wear protective gloves/protective clothing/eye protection/face protection  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Contaminated work clothing should not be allowed out of the workplace

**Precautionary Statements - Response**

Specific treatment (see .? 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 advice/attention  
IF ON SKIN: Wash with plenty of soap and water  
Take off contaminated clothing and wash before reuse  
If skin irritation or rash occurs: Get medical advice/attention

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

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

Unknown acute toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS No	Weight-%
BIS[4-(2,3-EPOXYPROPOXY)PHENYL]PROPANE	1675-54-3	30 - 60
LIMESTONE	1317-65-3	10 - 30
IRON	7439-89-6	10 - 30
SILICON	7440-21-3	1-10
NEOPENTYL GLYCOL DIGLYCIDYL ETHER	17557-23-2	1 - 5

**4. FIRST AID MEASURES**

**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 with soap and water. If skin irritation or rash occurs: Get medical advice/attention. 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. Call a physician.

**Self-protection of the first aider**

Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

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

**Symptoms**

May cause allergic skin reaction.

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

**Note to physicians**

Treat 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 precautions**

See section 12 for additional ecological information.

**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**

Use personal protective equipment as required. Dam up. Cover liquid spill with sand, earth or other non-combustible absorbent material. Take up mechanically, placing in appropriate containers for disposal. 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 breathing vapors or mists. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse. Use personal protective equipment as required.

**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, Acids, Bases

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
LIMESTONE 1317-65-3	-	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 15 mg/m <sup>3</sup> total dust (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction	TWA: 10 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable dust
SILICON 7440-21-3	-	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 10 mg/m <sup>3</sup> total dust (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction	TWA: 10 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable 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 natural rubber, nitrile rubber, Neoprene™ or PVC gloves.

**Respiratory protection** Use NIOSH-approved air-purifying respirator with organic vapor cartridge or canister, as appropriate.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice. Regular cleaning of equipment, work area and clothing is recommended.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**9.1. Information on basic physical and chemical properties**

**Physical state** Viscous liquid

Appearance Gray  
 Odor Mild  
 Odor threshold No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No information available	
Melting point / freezing point	No information available	
Boiling point / boiling range	No information available	
Flash point	> 95 °C / > 203 °F	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	>1	Air = 1
Relative density	1.52	
Water solubility	No information available	
Solubility(ies)	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	
<u>Other Information</u>		
Softening point	No information available	
Molecular weight	No information available	
VOC Content (%)	0	
Density	No information available	
Bulk density	No information available	
SADT (self-accelerating decomposition temperature)	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  
 Excessive heat.

Incompatible materials  
 Strong oxidizing agents, Acids, Bases

Hazardous Decomposition Products  
 Carbon oxides  
 Phenols

## 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

**Inhalation** May cause irritation of respiratory tract.

**Eye contact** Contact with eyes may cause irritation. May cause redness and tearing of the eyes.

**Skin contact** May cause skin irritation and/or dermatitis. May cause sensitization by skin contact.

**Ingestion** Ingestion may cause irritation to mucous membranes.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
BIS[4-(2,3-EPOXYPROPOXY)PHE NYL]PROPANE 1675-54-3	= 11300 µL/kg ( Rat )	= 20000 mg/kg ( Rabbit ) = 20 g/kg ( Rabbit )	-
IRON 7439-89-6	= 30 g/kg ( Rat )	-	-
SILICON 7440-21-3	= 3160 mg/kg ( Rat )	-	-
NEOPENTYL GLYCOL DIGLYCIDYL ETHER 17557-23-2	= 4500 mg/kg ( Rat )	-	-

**Information on toxicological effects**

**Symptoms** No information available.

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

**Sensitization** No information available.  
**Germ cell mutagenicity** No information available.  
**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
BIS[4-(2,3-EPOXYPROPOX Y)PHENYL]PROPANE 1675-54-3	-	Group 3	-	-

ACGIH (American Conference of Governmental Industrial Hygienists)  
*A2 - Suspected Human Carcinogen*  
 IARC (International Agency for Research on Cancer)  
*Not classifiable as a human carcinogen*  
 NTP (National Toxicology Program)  
*Known - Known Carcinogen*  
 OSHA (Occupational Safety and Health Administration of the US Department of Labor)  
*X - Present*

**Target Organ Effects** Eyes, Respiratory system, Skin.

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

**ATEmix (oral)** 13298 mg/kg  
**ATEmix (dermal)** 36364 mg/kg

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

**Mobility**

No information available.

**Other adverse effects**  
No information available

### 13. DISPOSAL CONSIDERATIONS

#### Waste treatment methods

<b>Disposal of wastes</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated packaging</b>	Do not reuse container.
<b>US EPA Waste Number</b>	Not applicable

### 14. TRANSPORT INFORMATION

#### DOT

**Proper shipping name:** Not regulated

#### IATA

**Proper shipping name:** Not regulated

#### IMDG

**Proper shipping name:** Not regulated

### 15. REGULATORY INFORMATION

#### International Inventories

<b>TSCA</b>	Complies
<b>DSL/NDSL</b>	Complies
<b>EINECS/ELINCS</b>	Does not comply
<b>ENCS</b>	Does not comply
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Does not comply
<b>AICS</b>	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 does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

##### **SARA 311/312 Hazard Categories**

<b>Acute health hazard</b>	Yes
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Chronic Health Hazard	No
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, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**US State Regulations**

**California Proposition 65**

This product contains the following Proposition 65 chemicals

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

Chemical Name	New Jersey	Massachusetts	Pennsylvania
LIMESTONE 1317-65-3	X	X	X
SILICON 7440-21-3	X	X	X

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

**WHMIS Hazard Class**

D2B - Toxic materials

**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

<b>NFPA</b>	Health hazards 2	Flammability 1	Instability 0	-
<b>HMIS</b>	Health hazards 2	Flammability 1	Physical hazards 0	Personal protection B

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

Revision Date 18-Mar-2020

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**End of Safety Data Sheet**