



SAFETY DATA SHEET

Revision Date 07-May-2020

Version 7

1. IDENTIFICATION

Product identifier

Product Name VERSACHEM 4-MINUTE STEEL EPOXY (RESIN)

Other means of identification

Product Code 44209

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
Carcinogenicity	Category 1A

Label elements

Emergency Overview

Signal word

Danger

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



Appearance Black

Physical state Liquid

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
Avoid breathing dust/fume/gas/mist/vapors/spray
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention
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 locked up

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.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
LIMESTONE	1317-65-3	30 - 60
BIS[4-(2,3-EPOXYPROPOXY)PHENYL]PROPANE	1675-54-3	15 - 40
AMORPHOUS SILICA	7631-86-9	3 - 7
SILICON	7440-21-3	1 - 5
BENZYL ALCOHOL	100-51-6	1 - 5
CRYSTALLINE SILICA	14808-60-7	0.1 - 1

4. FIRST AID MEASURES

Description of first aid measures

General advice	If symptoms persist, call a physician.
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.
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. Immediate medical attention is not required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician.
Inhalation	Immediate medical attention is not required. If symptoms persist, call a physician. Move to fresh air in case of accidental inhalation of vapors or decomposition products.
Ingestion	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician. Do NOT induce vomiting.
Self-protection of the first aider	Use personal protective equipment as required.

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

Use, Use dry chemical, Carbon dioxide (CO₂), Water spray (fog), Alcohol resistant foam

Unsuitable extinguishing media

None

Specific hazards arising from the chemical

Keep product and empty container away from heat and sources of ignition. Risk of ignition.

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 Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Remove all sources of ignition. Pay attention to flashback. Take precautionary measures against static discharges. Use personal protective equipment as required.

Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. 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. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Take precautionary measures against static discharges.
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 Use with local exhaust ventilation. All equipment used when handling the product must be grounded. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors).

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a cool, well-ventilated place. Keep away from heat. Keep in properly labeled containers.

Incompatible materials Strong oxidizing agents, Bases, Acids, Amines

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 ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 15 mg/m ³ total dust (vacated) TWA: 5 mg/m ³ respirable fraction	TWA: 10 mg/m ³ total dust TWA: 5 mg/m ³ respirable dust
AMORPHOUS SILICA 7631-86-9	-	TWA: 50 µg/m ³ excludes construction work, agricultural operations, and exposures that result from the processing of sorptive clays (vacated) TWA: 6 mg/m ³ <1% Crystalline silica TWA: 20 mppcf : (80)/(%) SiO ₂ mg/m ³ TWA	IDLH: 3000 mg/m ³ TWA: 6 mg/m ³
SILICON 7440-21-3	-	TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 10 mg/m ³ total dust (vacated) TWA: 5 mg/m ³ respirable fraction	TWA: 10 mg/m ³ total dust TWA: 5 mg/m ³ respirable dust
CRYSTALLINE SILICA 14808-60-7	TWA: 0.025 mg/m ³ respirable particulate matter	TWA: 50 µg/m ³ TWA: 50 µg/m ³ excludes construction work, agricultural operations, and exposures that result from the processing of sorptive clays (vacated) TWA: 0.1 mg/m ³ respirable dust : (250)/(%)SiO ₂ + 5) mppcf TWA respirable fraction : (10)/(%)SiO ₂ + 2) mg/m ³ TWA	IDLH: 50 mg/m ³ respirable dust TWA: 0.05 mg/m ³ respirable dust

		respirable fraction	
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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 Tight sealing safety 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 When using do not eat, drink or smoke. 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 Liquid
Appearance Black
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	> 232 °C / > 450 °F	
Flash point	> 95 °C / > 203 °F	
Evaporation rate	< 1	Butyl acetate = 1
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	1.62	
Water solubility	Negligible	
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	

Other Information
Softening point No information available
Molecular weight No information available
VOC Content (%) 2.5
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
Heat, flames and sparks.

Incompatible materials
Strong oxidizing agents, Bases, Acids, Amines

Hazardous Decomposition Products
Carbon oxides

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)	-
AMORPHOUS SILICA 7631-86-9	= 7900 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	> 2.2 mg/L (Rat) 1 h
SILICON 7440-21-3	= 3160 mg/kg (Rat)	-	-
BENZYL ALCOHOL 100-51-6	= 1230 mg/kg (Rat)	= 2 g/kg (Rabbit)	= 8.8 mg/L (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

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	-	-
AMORPHOUS SILICA 7631-86-9	-	Group 3	Known	X
CRYSTALLINE SILICA	A2	Group 1	Known	X

14808-60-7			
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ACGIH (American Conference of Governmental Industrial Hygienists)
A2 - Suspected Human Carcinogen
 IARC (International Agency for Research on Cancer)
Group 1 - Carcinogenic to Humans
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) 14677 mg/kg
ATEmix (dermal) 25006 mg/kg
ATEmix (inhalation-dust/mist) 60 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

0.4 % 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.

Chemical Name	Partition coefficient
BENZYL ALCOHOL 100-51-6	1.1

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal 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

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

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Not determined
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	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 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

Acute health hazard	Yes
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

Chemical Name	California Proposition 65
AMORPHOUS SILICA 7631-86-9	*Carcinogen
CRYSTALLINE SILICA 14808-60-7	*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
LIMESTONE 1317-65-3	X	X	X
AMORPHOUS SILICA 7631-86-9	-	X	X
BENZYL ALCOHOL 100-51-6	-	X	X
SILICON 7440-21-3	X	X	X
CRYSTALLINE SILICA 14808-60-7	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

NFPA	Health hazards 2	Flammability 1	Instability 0	-
HMIS	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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End of Safety Data Sheet