Permatex.

SAFETY DATA SHEET

Revision Date 27-Apr-2015 Version 1

1. IDENTIFICATION

Product identifier

Product Name VERSACHEM GASKET SEALANT TYPE 1 85 GR

Other means of identification

Product Code 13009V 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

Contract Number: MIS0003453

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)

Acute toxicity - Oral	Category 3
Skin sensitization	Category 1
Carcinogenicity	Category 2

Label elements

Emergency Overview

Danger

Toxic if swallowed

May cause an allergic skin reaction Suspected of causing cancer



Appearance Reddish golden brown

Physical state Paste

Odor Alcohol

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 eat, drink or smoke when using this product

Avoid breathing dust/fume/gas/mist/vapors/spray

Contaminated work clothing should not be allowed out of the workplace

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

Specific treatment (see supplemental first aid instructions on this label)

IF ON SKIN: Wash with plenty of soap and water

If skin irritation or rash occurs: Get medical advice/attention

Wash contaminated clothing before reuse

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Rinse mouth

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.

Unknown acute toxicity

58.78% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

substance(s)

Chemical Name	CAS No	Weight-%	Trade Secret
KAOLIN	1332-58-7	30 - 60	*
ROSIN	8050-09-7	10 - 30	*
ETHANOL	64-17-5	7 - 13	*
2-PROPANOL	67-63-0	1 - 5	*
TITANIUM DIOXIDE	13463-67-7	0.1 - 1	*
CRYSTALLINE SILICA	14808-60-7	0.1 - 1	*
METHANOL	67-56-1	0.1 - 1	*

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

4. FIRST AID MEASURES

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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:. Call a physician or poison control center immediately. Rinse mouth.

Self-protection of the first aider

Use 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

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 Do not flush into surface water or sanitary sewer system. 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 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. Use personal protective equipment as required.

Conditions for safe storage, including any incompatibilities

Storage Conditions Store locked up.

Incompatible materials Strong oxidizing agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
KAOLIN 1332-58-7	TWA: 2 mg/m³ particulate matter containing no asbestos and <1% crystalline silica, respirable fraction	TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction (vacated) TWA: 10 mg/m³ total dust (vacated) TWA: 5 mg/m³ respirable fraction	TWA: 10 mg/m³ total dust TWA: 5 mg/m³ respirable dust
ROSIN 8050-09-7	-	(vacated) TWA: 0.1 mg/m³ Formaldehyde	TWA: 0.1 mg/m³ Formaldehyde
ETHANOL 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m³ (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m³	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m³
2-PROPANOL 67-63-0	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m³ (vacated) TWA: 400 ppm (vacated) TWA: 980 mg/m³ (vacated) STEL: 500 ppm (vacated) STEL: 1225 mg/m³	IDLH: 2000 ppm TWA: 400 ppm TWA: 980 mg/m³ STEL: 500 ppm STEL: 1225 mg/m³
TITANIUM DIOXIDE 13463-67-7	TWA: 10 mg/m ³	TWA: 15 mg/m³ total dust (vacated) TWA: 10 mg/m³ total dust	IDLH: 5000 mg/m ³
CRYSTALLINE SILICA 14808-60-7	TWA: 0.025 mg/m³ respirable fraction	(vacated) TWA: 0.1 mg/m³ respirable dust : (30)/(%SiO2 + 2) mg/m³ TWA total dust : (250)/(%SiO2 + 5) mppcf TWA respirable fraction : (10)/(%SiO2 + 2) mg/m³ TWA respirable fraction	IDLH: 50 mg/m³ respirable dust TWA: 0.05 mg/m³ respirable dust
METHANOL 67-56-1	STEL: 250 ppm TWA: 200 ppm S*	TWA: 200 ppm TWA: 260 mg/m³ (vacated) TWA: 200 ppm (vacated) TWA: 260 mg/m³ (vacated) STEL: 250 ppm (vacated) STEL: 325 mg/m³ (vacated) S*	IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m³ STEL: 250 ppm STEL: 325 mg/m³

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

> Evewash 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.

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

appropriate.

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

equipment, work area and clothing is recommended.

Air = 1

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Paste

Reddish golden brown **Appearance**

Odor Alcohol

Odor threshold No information available

Property Remarks • Method Values

No information available pН No information available

Melting point / freezing point 82 °C / 180 °F

Boiling point / boiling range

Flash point Does not apply ASTM D 4359 **Evaporation rate** 7.7 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 33 mmHg @ 68°F

Vapor density >1

Relative density 1.44

Water solubility Partially soluble

Solubility in other solvents 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

No information available Softening point Molecular weight No information available

VOC Content (%) 13.5%

Density No information available **Bulk density** No 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

Hazardous Decomposition Products

Carbon oxides Aldehydes Carboxylic acids

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 Toxic if swallowed.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
ROSIN	= 3 mg/kg (Rat) = 7600 mg/kg (> 2500 mg/kg (Rabbit)	= 1.5 mg/L (Rat) 4 h
8050-09-7	Rat)		
ETHANOL	= 7060 mg/kg (Rat)	-	= 124.7 mg/L (Rat) 4 h
64-17-5			
2-PROPANOL	= 1870 mg/kg (Rat)	= 4059 mg/kg (Rabbit)	= 72600 mg/m ³ (Rat) 4 h
67-63-0			
TITANIUM DIOXIDE	> 10000 mg/kg (Rat)	-	-
13463-67-7			
CRYSTALLINE SILICA	= 500 mg/kg (Rat)	-	-
14808-60-7			
METHANOL	= 6200 mg/kg (Rat)	= 15800 mg/kg (Rabbit)	= 22500 ppm (Rat) 8 h = 64000
67-56-1			ppm (Rat)4h

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.

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

Carcinogernoity	THE TABLE DE	The table below indicates whether each agency has listed any ingredient as a carolingen.		nedieni as a carollogen.
Chemical Name	ACGIH	IARC	NTP	OSHA
ETHANOL	A3	Group 1	Known	X
64-17-5				
2-PROPANOL	-	Group 1	-	X
67-63-0				
TITANIUM DIOXIDE	-	Group 2B	-	X
13463-67-7		•		

CRYSTALLINE SILICA	Δ2	Group 1	Known	Y
OIL IO I ALLINE SILIOA	△	Group r	KIIOWII	^
14808-60-7		-		

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2B - Possibly 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

Chronic toxicity May cause adverse effects on the bone marrow and blood-forming system. May cause

adverse liver effects. Contains a known or suspected reproductive toxin.

Target Organ Effects Blood, Central nervous system, Eyes, Liver, Reproductive System, Respiratory system,

Skin, Thyroid.

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

ATEmix (oral) 5 mg/kg
ATEmix (dermal) 3403 mg/kg
ATEmix (inhalation-dust/mist) 31 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

60.82% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
ROSIN 8050-09-7			3.8 - 5.4: 48 h Daphnia magna mg/L EC50
ETHANOL 64-17-5	-	12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 100: 96 h Pimephales promelas mg/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through	9268 - 14221: 48 h Daphnia magna mg/L LC50 2: 48 h Daphnia magna mg/L EC50 Static 10800: 24 h Daphnia magna mg/L EC50
2-PROPANOL 67-63-0	1000: 96 h Desmodesmus subspicatus mg/L EC50 1000: 72 h Desmodesmus subspicatus mg/L EC50	11130: 96 h Pimephales promelas mg/L LC50 static 9640: 96 h Pimephales promelas mg/L LC50 flow-through 1400000: 96 h Lepomis macrochirus µg/L LC50	13299: 48 h Daphnia magna mg/L EC50
67-56-1		28200: 96 h Pimephales promelas mg/L LC50 flow-through 100: 96 h Pimephales promelas mg/L LC50 static 19500 - 20700: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 13500 - 17600: 96 h Lepomis macrochirus mg/L LC50 flow-through 18 - 20: 96 h Oncorhynchus mykiss mL/L LC50 static	-

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility

No information available.

Chemical Name	Partition coefficient
ETHANOL	-0.32
64-17-5	

2-PROPANOL 67-63-0	0.05
METHANOL 67-56-1	-0.77

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

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
METHANOL	-	Included in waste stream:	-	U154
67-56-1		F039		

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
ETHANOL	Toxic
64-17-5	Ignitable
2-PROPANOL	Toxic
67-63-0	Ignitable
METHANOL	Toxic
67-56-1	Ignitable

14. TRANSPORT INFORMATION

DOT

Proper shipping name: Not regulated

<u>IATA</u>

Proper shipping name: Not regulated

IMDG

Proper shipping name: Not regulated

15. REGULATORY INFORMATION

International Inventories

Complies **TSCA** DSL/NDSL Complies **EINECS/ELINCS** Complies **ENCS** Not Listed. **IECSC** Complies Complies **KECL PICCS** Complies **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 %
2-PROPANOL - 67-63-0	1.0
SARA 311/312 Hazard Categories	
Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No

No

CWA (Clean Water Act)

Reactive Hazard

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)
METHANOL	5000 lb	-	RQ 5000 lb final RQ
67-56-1			RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65	
ETHANOL - 64-17-5	Carcinogen Developmental	
TITANIUM DIOXIDE - 13463-67-7	Carcinogen	
CRYSTALLINE SILICA - 14808-60-7	Carcinogen	
METHANOL - 67-56-1	Developmental	
METHYL ISOBUTYL KETONE - 108-10-1	Carcinogen Developmental	

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
KAOLIN 1332-58-7	X	Х	X
ETHANOL 64-17-5	X	X	X
2-PROPANOL 67-63-0	X	Х	X
TITANIUM DIOXIDE 13463-67-7	Х	Х	X
CRYSTALLINE SILICA 14808-60-7	Х	Х	Х
METHANOL 67-56-1	X	X	X

IRON OXIDE 1309-37-1	Х	Х	Х
METHYL ISOBUTYL KETONE 108-10-1	Х	Х	Х

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