Permatex.

SAFETY DATA SHEET

Revision Date 05-Apr-2016 Version 3

1. IDENTIFICATION

Product identifier

Product Name VERSACHEM GASKET SEALANT TYPE 1 85 GR

Other means of identification

Product Code 13009 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

Manufacturer Address <u>Distributor</u>

ITW Permatex Canada
6875 Parkland Blvd. 35 Brownridge Road, Unit 1
Solon, OH 44139 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 2
Skin sensitization	Category 1
Carcinogenicity	Category 2

Label elements

Emergency Overview

Danger

Fatal 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 mists or vapors

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

- Toxic to aquatic life with long lasting effects

Unknown acute toxicity

6.4 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

substance(s)

Chemical Name	CAS No	Weight-%	Trade Secret
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	*
METHYL ISOBUTYL KETONE	108-10-1	0.1 - 1	*

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

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:. Call a physician or poison control center immediately. Do NOT induce

vomiting. Rinse mouth.

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

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. Collect spillage. 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
ROSIN -		(vacated) TWA: 0.1 mg/m ³	TWA: 0.1 mg/m ³ Formaldehyde
8050-09-7	8050-09-7		
ETHANOL	STEL: 1000 ppm	TWA: 1000 ppm	IDLH: 3300 ppm
64-17-5		TWA: 1900 mg/m ³	TWA: 1000 ppm
		(vacated) TWA: 1000 ppm	TWA: 1900 mg/m ³
		(vacated) TWA: 1900 mg/m ³	
2-PROPANOL	STEL: 400 ppm	TWA: 400 ppm	IDLH: 2000 ppm
67-63-0	TWA: 200 ppm	TWA: 980 mg/m ³	TWA: 400 ppm
		(vacated) TWA: 400 ppm	TWA: 980 mg/m ³
		(vacated) TWA: 980 mg/m ³	STEL: 500 ppm
		(vacated) STEL: 500 ppm	STEL: 1225 mg/m ³
		(vacated) STEL: 1225 mg/m ³	
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	
CRYSTALLINE SILICA	TWA: 0.025 mg/m³ respirable	(vacated) TWA: 0.1 mg/m ³	IDLH: 50 mg/m³ respirable dust
14808-60-7	fraction	respirable dust	TWA: 0.05 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	
14571001000117011670115	0751	respirable fraction	15111
METHYL ISOBUTYL KETONE	STEL: 75 ppm	TWA: 100 ppm	IDLH: 500 ppm
108-10-1	TWA: 20 ppm	TWA: 410 mg/m ³	TWA: 50 ppm
		(vacated) TWA: 50 ppm	TWA: 205 mg/m ³
		(vacated) TWA: 205 mg/m ³	STEL: 75 ppm
		(vacated) STEL: 75 ppm	STEL: 300 mg/m ³
		(vacated) STEL: 300 mg/m ³	

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 protectionUse 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.

Air = 1

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Paste

Appearance Reddish golden brown

Odor Alcohol

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 82 °C / 180 °F

Flash pointDoes not applyASTM D 4359Evaporation rate7.7Butyl acetate = 1

Flammability (solid, gas) No information available

Flammability Limit in Air

Upper flammability limit:

Lower flammability limit:

No information available

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 **Dvnamic viscosity** No information available **Explosive properties** No information available Oxidizing properties No information available

Other Information

Softening pointNo information availableMolecular weightNo information available

VOC Content (%) 13.5%

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

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 8050-09-7	= 3 mg/kg (Rat) = 7600 mg/kg (Rat)	> 2500 mg/kg (Rabbit)	= 1.5 mg/L (Rat) 4 h
ETHANOL 64-17-5	= 7060 mg/kg (Rat)	-	= 124.7 mg/L (Rat) 4 h
2-PROPANOL 67-63-0	= 1870 mg/kg (Rat)	= 4059 mg/kg (Rabbit)	= 72600 mg/m³ (Rat) 4 h
TITANIUM DIOXIDE 13463-67-7	> 10000 mg/kg (Rat)	-	-
CRYSTALLINE SILICA 14808-60-7	= 500 mg/kg (Rat)	-	-
METHYL ISOBUTYL KETONE 108-10-1	= 2080 mg/kg (Rat)	= 3000 mg/kg (Rabbit)	= 8.2 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
ETHANOL 64-17-5	A3	Group 1	Known	Х
TITANIUM DIOXIDE 13463-67-7	-	Group 2B	-	Х
CRYSTALLINE SILICA 14808-60-7	A2	Group 1	Known	Х
METHYL ISOBUTYL KETONE 108-10-1	А3	Group 2B	-	X

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

Target Organ Effects

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

adverse liver effects. Contains a known or suspected reproductive toxin. 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) 12 mg/kg ATEmix (dermal) 8255 mg/kg ATEmix (inhalation-dust/mist) 82.1 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

7.55 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
ROSIN	400: 72 h Desmodesmus	-	3.8 - 5.4: 48 h Daphnia magna mg/L
8050-09-7	subspicatus mg/L EC50		EC50
ETHANOL	-	12.0 - 16.0: 96 h Oncorhynchus	9268 - 14221: 48 h Daphnia magna
64-17-5		mykiss mL/L LC50 static 100: 96 h	
		Pimephales promelas mg/L LC50	mg/L EC50 Static 10800: 24 h
		static 13400 - 15100: 96 h	Daphnia magna mg/L EC50
		Pimephales promelas mg/L LC50	
		flow-through	
2-PROPANOL	1000: 96 h Desmodesmus	9640: 96 h Pimephales promelas	13299: 48 h Daphnia magna mg/L
67-63-0	subspicatus mg/L EC50 1000: 72 h		EC50
	Desmodesmus subspicatus mg/L	h Pimephales promelas mg/L LC50	
	EC50	static 1400000: 96 h Lepomis	
		macrochirus µg/L LC50	
METHYL ISOBUTYL KETONE	400: 96 h Pseudokirchneriella	496 - 514: 96 h Pimephales	170: 48 h Daphnia magna mg/L
108-10-1	subcapitata mg/L EC50	promelas mg/L LC50 flow-through	EC50

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	0.05
67-63-0	
METHYL ISOBUTYL KETONE	1.19
108-10-1	

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

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
METHYL ISOBUTYL	=	Included in waste stream:	=	U161
KETONE		F039		
108-10-1				

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

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 Not Listed. **ENCS** Complies **IECSC KECL** Complies **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 hazardYesChronic Health HazardNoFire hazardNoSudden release of pressure hazardNoReactive HazardNo

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)
METHYL ISOBUTYL KETONE	5000 lb	-	RQ 5000 lb final RQ
108-10-1			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	X	X	X
1332-58-7			
ETHANOL	X	X	X
64-17-5			
2-PROPANOL	X	X	X
67-63-0			
TITANIUM DIOXIDE	X	X	X
13463-67-7			
CRYSTALLINE SILICA	X	X	X
14808-60-7			
METHANOL	X	X	X
67-56-1			
IRON OXIDE	X	X	X
1309-37-1			
METHYL ISOBUTYL KETONE	X	X	X
108-10-1			

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)

Revision Date 05-Apr-2016

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.

End of Safety Data Sheet