

Revision Date 18-Mar-2015

Version 1

SAFETY DATA SHEET

	1. IDENTIFICATION
Product identifier	
Product Name	2BR_FORM A GASKET #2 SEALANT_307
FIGUUCI Name	ZBR FORWA GASRET #2 SEALANT SOZ
Other means of identification	
Product Code	80016
Synonyms	None
Recommended use of the chemica	I and restrictions on use
Recommended Use	Sealant
Uses advised against	No information available
-	
Details of the supplier of the safety	<u>/ data sheet</u>
Manufacturer Address	Distributor
ITW Permatex	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 Numbe	
	International Emergency:
	00+1+ 813-248-0585
	Contract Number: MIS0003453

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 1A

Label elements

Emergency Overview

Danger

Toxic if swallowed May cause an allergic skin reaction May cause cancer



Appearance Reddish golden brown

Physical state Paste Liquid

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 Wear protective gloves

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

70.049% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Chemical Name	CAS No	Weight-%	Trade Secret
KAOLIN	1332-58-7	30 - 60	*
ROSIN	8050-09-7	10 - 30	*
ETHANOL	64-17-5	5 - 10	*
2-PROPANOL	67-63-0	1 - 5	*
CRYSTALLINE SILICA	14808-60-7	1 - 5	*
TITANIUM DIOXIDE	13463-67-7	0.1 - 1	*
CARBON BLACK	1333-86-4	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

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 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	Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.
Most important symptoms and effe	ects, both acute and delayed
Symptoms	See section 2 for more information.
Indication of any immediate medic	al attention and special treatment needed
Note to physicians	Treat symptomatically.
	5. FIRE-FIGHTING MEASURES
Suitable extinguishing media Carbon dioxide (CO2), Dry chemical,	Foam
	Foam
Carbon dioxide (CO2), Dry chemical, Unsuitable extinguishing media	
Carbon dioxide (CO2), Dry chemical, Unsuitable extinguishing media None. Specific hazards arising from the c	
Carbon dioxide (CO2), Dry chemical, <u>Unsuitable extinguishing media</u> None. <u>Specific hazards arising from the c</u> None in particular. <u>Explosion data</u> <u>Sensitivity to Mechanical Impact</u> <u>Sensitivity to Static Discharge</u> <u>Protective equipment and precauti</u>	<mark>hemical</mark> None. None.
Carbon dioxide (CO2), Dry chemical, Unsuitable extinguishing media None. Specific hazards arising from the of None in particular. Explosion data Sensitivity to Mechanical Impact Sensitivity to Static Discharge Protective equipment and precauti As in any fire, wear self-contained bro	hemical None. None. ons for firefighters
Carbon dioxide (CO2), Dry chemical, Unsuitable extinguishing media None. Specific hazards arising from the of None in particular. Explosion data Sensitivity to Mechanical Impact Sensitivity to Static Discharge Protective equipment and precauti As in any fire, wear self-contained bro protective gear.	hemical None. None. ons for firefighters eathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full
Carbon dioxide (CO2), Dry chemical, Unsuitable extinguishing media None. Specific hazards arising from the of None in particular. Explosion data Sensitivity to Mechanical Impact Sensitivity to Static Discharge Protective equipment and precauti As in any fire, wear self-contained bro protective gear.	chemical None. None. ons for firefighters eathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full 6. ACCIDENTAL RELEASE MEASURES
Carbon dioxide (CO2), Dry chemical, Unsuitable extinguishing media None. Specific hazards arising from the of None in particular. Explosion data Sensitivity to Mechanical Impact Sensitivity to Static Discharge Protective equipment and precauti As in any fire, wear self-contained bro- protective gear. Personal precautions, protective e	hemical None. None

Methods and material for containment and cleaning up

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

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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, includi	ng any incompatibilities
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. 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/m ³ particulate matter containing no asbestos and <1% crystalline silica, respirable fraction	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
ROSIN 8050-09-7	-	(vacated) TWA: 0.1 mg/m ³ Formaldehyde	TWA: 0.1 mg/m ³ Formaldehyde
ETHANOL 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m ³ (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m ³	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m ³
2-PROPANOL 67-63-0	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m ³ (vacated) TWA: 400 ppm (vacated) TWA: 980 mg/m ³ (vacated) STEL: 500 ppm (vacated) STEL: 1225 mg/m ³	IDLH: 2000 ppm TWA: 400 ppm TWA: 980 mg/m ³ STEL: 500 ppm STEL: 1225 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/m ³ respirable dust TWA: 0.05 mg/m ³ respirable dust
TITANIUM DIOXIDE 13463-67-7	TWA: 10 mg/m ³	TWA: 15 mg/m ³ total dust (vacated) TWA: 10 mg/m ³ total dust	IDLH: 5000 mg/m ³
CARBON BLACK 1333-86-4	TWA: 3 mg/m ³ inhalable fraction	TWA: 3.5 mg/m ³ (vacated) TWA: 3.5 mg/m ³	IDLH: 1750 mg/m ³ TWA: 3.5 mg/m ³ TWA: 0.1 mg/m ³ Carbon black in presence of Polycyclic aromatic hydrocarbons PAH
METHYL ISOBUTYL KETONE 108-10-1	STEL: 75 ppm TWA: 20 ppm	TWA: 100 ppm TWA: 410 mg/m ³ (vacated) TWA: 50 ppm (vacated) TWA: 205 mg/m ³ (vacated) STEL: 75 ppm (vacated) STEL: 300 mg/m ³	IDLH: 500 ppm TWA: 50 ppm TWA: 205 mg/m ³ STEL: 75 ppm 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, su	ch 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.
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

Information on basic physical and chemical properties

Physical state Appearance Odor Odor threshold	Paste, Liquid Reddish golden brown Alcohol No information available	
Property_	Values_	Remarks • Method
рН	No information available	
Melting point / freezing point	No information available	
Boiling point / boiling range	82 °C / 180 °F	
Flash point	Does not apply	ASTM D 4359
Evaporation rate	7.7	Ether = 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 mm Hg @ 68°F	
Vapor density	2.0	Air = 1
Relative density	1.5	
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		
Softening point	No information available	
Molecular weight	No information available	
VOC Content (%)	11%	
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 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
CRYSTALLINE SILICA 14808-60-7	= 500 mg/kg(Rat)	-	-
TITANIUM DIOXIDE 13463-67-7	> 10000 mg/kg (Rat)	-	-
CARBON BLACK 1333-86-4	> 15400 mg/kg (Rat)	> 3 g/kg (Rabbit)	-
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 Germ cell mutagenicity Carcinogenicity	No informati		ch agency has listed any ing	gredient as a carcinogen.
Chemical Name	ACGIH	IARC	NTP	OSHA
ETHANOL 64-17-5	A3	Group 1	Known	Х
2-PROPANOL 67-63-0	-	Group 1	-	Х
CRYSTALLINE SILICA 14808-60-7	A2	Group 1	Known	Х

TITANIUM DIOXIDE 13463-67-7	-	Group 2B	-	X
CARBON BLACK	A3	Group 2B	-	Х
1333-86-4				
METHYL ISOBUTYL	A3	Group 2B	-	Х
KETONE				
108-10-1				
ACGIH (American Confe	erence of Governmental li	ndustrial Hygienists)		
A2 - Suspected Human C	arcinogen			
A3 - Animal Carcinogen				
IARC (International Age	ncy for Research on Can	cer)		
Group 1 - Carcinogenic to) Ĥumans			
Group 2B - Possibly Card	inogenic to Humans			
NTP (National Toxicolog				
Known - Known Carcinog	jen			
OSHA (Occupational Sa	fety and Health Administ	tration of the US Department o	of Labor)	
X - Present				
Chronic toxicity	•	adverse effects on the bone er effects. Contains a known		
Target Organ Effects		Blood, Central nervous system, Eyes, Liver, Lungs, Reproductive System, Respiratory system, Skin, Thyroid.		

Numerical measures of toxicity - Product Information

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

ATEmix (oral)	6 mg/kg
ATEmix (dermal)	3665 mg/kg
ATEmix (inhalation-dust/mist)	28 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

72.224% 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	400: 72 h Desmodesmus subspicatus mg/L EC50	-	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
CARBON BLACK 1333-86-4	-	-	5600: 24 h Daphnia magna mg/L EC50
METHYL ISOBUTYL KETONE 108-10-1	400: 96 h Pseudokirchneriella subcapitata mg/L EC50	496 - 514: 96 h Pimephales promelas mg/L LC50 flow-through	170: 48 h Daphnia magna mg/L 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 67-63-0	0.05
METHYL ISOBUTYL KETONE 108-10-1	1.19

Other adverse effects

No information available

KETONE

108-10-1

13. DISPOSAL CONSIDERATIONS

Waste treatment method	<u>s</u>			
Disposal of wastes	Disposal sho regulations.	Disposal should be in accordance with applicable regional, national and local laws and regulations.		
Contaminated packaging	Do not reuse	Do not reuse container.		
US EPA Waste Number	Not applicabl	Not applicable		
Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
METHYL ISOBUTYL	-	Included in waste stream:	-	U161

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

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	Does not comply
IECSC	Complies
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

<u>SARA 313</u>

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	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)

<u>CERCLA</u>

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
LIC Otata Danulatiana			

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
CRYSTALLINE SILICA - 14808-60-7	Carcinogen
TITANIUM DIOXIDE - 13463-67-7	Carcinogen
METHANOL - 67-56-1	Developmental
CARBON BLACK - 1333-86-4	Carcinogen
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	Х	X	Х
ETHANOL 64-17-5	Х	X	Х
2-PROPANOL 67-63-0	Х	X	Х
CRYSTALLINE SILICA 14808-60-7	Х	X	Х
TITANIUM DIOXIDE 13463-67-7	Х	X	Х
METHANOL 67-56-1	Х	X	Х
CARBON BLACK 1333-86-4	Х	X	Х
METHYL ISOBUTYL KETONE 108-10-1	Х	Х	Х

U.S. EPA Label Information EPA Pesticide Registration Number Not applicable

	hazards 2 Flammab	ility 1 Instal	bility 0 -	
HMIS Health I	hazards 2 Flammab	ility 1 Physi	ical hazards 0 Persona	al protection B

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

Revision Date 18-Mar-201

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