



# SAFETY DATA SHEET

Revision Date 18-Mar-2015

Version 1

## 1. IDENTIFICATION

### Product identifier

**Product Name** 2C FORM-A-GASKET #2 SEALANT 11OZ

### Other means of identification

**Product Code** 80011

**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

ITW Permatex  
10 Columbus Blvd.  
Hartford, CT 06106 USA

#### Distributor

ITW Permatex Canada  
35 Brownridge Road, Unit 1  
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

## 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

<b>General advice</b>	Get medical advice/attention if you feel unwell.
<b>Eye contact</b>	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.
<b>Skin contact</b>	IF ON SKIN: Wash skin with soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
<b>Inhalation</b>	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, call a physician.
<b>Ingestion</b>	IF SWALLOWED. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician.
<b>Self-protection of the first aider</b>	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

**Note to physicians** Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

##### Suitable extinguishing media

Carbon dioxide (CO<sub>2</sub>), 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** 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** 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 <sup>3</sup> particulate matter containing no asbestos and <1% crystalline silica, respirable fraction	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
ROSIN 8050-09-7	-	(vacated) TWA: 0.1 mg/m <sup>3</sup> Formaldehyde	TWA: 0.1 mg/m <sup>3</sup> Formaldehyde
ETHANOL 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup> (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m <sup>3</sup>	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>
2-PROPANOL 67-63-0	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m <sup>3</sup> (vacated) TWA: 400 ppm (vacated) TWA: 980 mg/m <sup>3</sup> (vacated) STEL: 500 ppm (vacated) STEL: 1225 mg/m <sup>3</sup>	IDLH: 2000 ppm TWA: 400 ppm TWA: 980 mg/m <sup>3</sup> STEL: 500 ppm STEL: 1225 mg/m <sup>3</sup>
CRYSTALLINE SILICA 14808-60-7	TWA: 0.025 mg/m <sup>3</sup> respirable fraction	(vacated) TWA: 0.1 mg/m <sup>3</sup> respirable dust : (30)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA total dust : (250)/(%SiO <sub>2</sub> + 5) mppcf TWA respirable fraction : (10)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA respirable fraction	IDLH: 50 mg/m <sup>3</sup> respirable dust TWA: 0.05 mg/m <sup>3</sup> respirable dust
TITANIUM DIOXIDE 13463-67-7	TWA: 10 mg/m <sup>3</sup>	TWA: 15 mg/m <sup>3</sup> total dust (vacated) TWA: 10 mg/m <sup>3</sup> total dust	IDLH: 5000 mg/m <sup>3</sup>
CARBON BLACK 1333-86-4	TWA: 3 mg/m <sup>3</sup> inhalable fraction	TWA: 3.5 mg/m <sup>3</sup> (vacated) TWA: 3.5 mg/m <sup>3</sup>	IDLH: 1750 mg/m <sup>3</sup> TWA: 3.5 mg/m <sup>3</sup> TWA: 0.1 mg/m <sup>3</sup> 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 <sup>3</sup> (vacated) TWA: 50 ppm (vacated) TWA: 205 mg/m <sup>3</sup> (vacated) STEL: 75 ppm (vacated) STEL: 300 mg/m <sup>3</sup>	IDLH: 500 ppm TWA: 50 ppm TWA: 205 mg/m <sup>3</sup> STEL: 75 ppm STEL: 300 mg/m <sup>3</sup>

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 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** Paste, Liquid  
**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 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

<b>11. TOXICOLOGICAL INFORMATION</b>
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**Information on likely routes of exposure**

<b>Inhalation</b>	May cause irritation of respiratory tract.
<b>Eye contact</b>	Contact with eyes may cause irritation. May cause redness and tearing of the eyes.
<b>Skin contact</b>	May cause skin irritation and/or dermatitis. May cause sensitization by skin contact.
<b>Ingestion</b>	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/m <sup>3</sup> ( 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** 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	X
2-PROPANOL 67-63-0	-	Group 1	-	X
CRYSTALLINE SILICA 14808-60-7	A2	Group 1	Known	X

TITANIUM DIOXIDE 13463-67-7	-	Group 2B	-	X
CARBON BLACK 1333-86-4	A3	Group 2B	-	X
METHYL ISOBUTYL KETONE 108-10-1	A3	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

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, 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 component(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 64-17-5	-0.32

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

**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 KETONE 108-10-1	-	Included in waste stream: F039	-	U161

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 64-17-5	Toxic Ignitable
2-PROPANOL 67-63-0	Toxic 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**

<b>TSCA</b>	Complies
<b>DSL/NDSL</b>	Complies
<b>EINECS/ELINCS</b>	Complies
<b>ENCS</b>	Does not comply
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<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 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	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)

#### **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 108-10-1	5000 lb	-	RQ 5000 lb final RQ 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
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	X	X	X
ETHANOL 64-17-5	X	X	X
2-PROPANOL 67-63-0	X	X	X
CRYSTALLINE SILICA 14808-60-7	X	X	X
TITANIUM DIOXIDE 13463-67-7	X	X	X
METHANOL 67-56-1	X	X	X
CARBON BLACK 1333-86-4	X	X	X
METHYL ISOBUTYL KETONE 108-10-1	X	X	X

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

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

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

**Revision Date** 18-Mar-2015

**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**