



# SAFETY DATA SHEET

Revision Date 03-Oct-2018

Version 10

## 1. IDENTIFICATION

**Product identifier**

**Product Name** 2AR FORM A GASKET #2 SEALANT 1.5OZ

**Other means of identification**

**Product Code** 80015

**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  
 6875 Parkland Blvd.  
 Solon, OH 44139 USA

**May Also Be Distributed by:**

ITW Permatex Canada  
 101-2360 Bristol Circle  
 Oakville, ON Canada L6H 6M5  
 Telephone: (800) 924-6994

**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)

Skin sensitization	Category 1
Carcinogenicity	Category 2

**Label elements**

**Emergency Overview**

**Signal word**

**Warning**

May cause an allergic skin reaction  
 Suspected of causing cancer



**Appearance** Black**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  
 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  
 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

**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**

- Not applicable

Unknown acute toxicity

16.79 % of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance(s)**

Chemical Name	CAS No	Weight-%
FUMARATED RESIN	65997-04-8	10 - 30
ETHANOL	64-17-5	5 - 10
2-PROPANOL	67-63-0	1 - 5
METHANOL	67-56-1	0.1 - 1
METHYL ISOBUTYL KETONE	108-10-1	0.1 - 1

### 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 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** Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

**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**

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** Store in a well-ventilated place. Keep cool.

Incompatible materials Strong oxidizing agents

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### **Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
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>
METHANOL 67-56-1	STEL: 250 ppm TWA: 200 ppm S*	TWA: 200 ppm TWA: 260 mg/m <sup>3</sup> (vacated) TWA: 200 ppm (vacated) TWA: 260 mg/m <sup>3</sup> (vacated) STEL: 250 ppm (vacated) STEL: 325 mg/m <sup>3</sup> (vacated) S*	IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m <sup>3</sup> STEL: 250 ppm STEL: 325 mg/m <sup>3</sup>
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 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**

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**

<b>Physical state</b>	Paste
<b>Appearance</b>	Black
<b>Odor</b>	Alcohol
<b>Odor threshold</b>	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**

Stable under normal conditions

**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**

<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. Repeated or prolonged skin contact may cause

allergic reactions with susceptible persons.

**Ingestion**

Ingestion may cause irritation to mucous membranes.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
ETHANOL 64-17-5	= 7060 mg/kg ( Rat )	-	= 124.7 mg/L ( Rat ) 4 h
2-PROPANOL 67-63-0	5050 mg/kg	12800 mg/kg	= 72600 mg/m <sup>3</sup> ( Rat ) 4 h
METHANOL 67-56-1	= 6200 mg/kg ( Rat )	= 15800 mg/kg ( Rabbit )	= 22500 ppm ( Rat ) 8 h = 64000 ppm ( Rat ) 4 h
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	-	Known	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.

**Target Organ Effects**

Blood, Central nervous system, Eyes, Liver, Reproductive System, Respiratory system, Skin, Thyroid, Lungs.

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

ATEmix (oral) 9865 mg/kg

ATEmix (dermal) 48276 mg/kg

ATEmix (inhalation-dust/mist) 85.1 mg/l

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

18.075 % 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
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ETHANOL 64-17-5	-0.32
2-PROPANOL 67-63-0	0.05
METHANOL 67-56-1	-0.77
METHYL ISOBUTYL KETONE 108-10-1	1.19

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS****Waste treatment methods**

<b>Disposal of wastes</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated packaging</b>	Do not reuse container.
<b>US EPA Waste Number</b>	Not applicable

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
METHANOL 67-56-1	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>	Not determined
<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	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, 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 67-56-1	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final 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 (airborne, unbound particles of respirable size)
METHANOL - 67-56-1	Developmental
CARBON BLACK - 1333-86-4	*Carcinogen (airborne, unbound particles of respirable size)
METHYL ISOBUTYL KETONE - 108-10-1	Carcinogen Developmental

- \*The asterisked chemical(s) listed are not subject to Proposition 65 because they are not airborne in the finished product
- Ethanol has been shown to be carcinogenic in long-term studies only when consumed as alcoholic beverage
- Ethanol has been shown to be a reproductive toxin only when consumed as an alcoholic beverage

#### 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

**WHMIS Hazard Class**

D2B - Toxic materials

**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

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

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

Revision Date 03-Oct-2018

**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**