



# SAFETY DATA SHEET

Revision Date 06-Feb-2019

Version 8

## 1. IDENTIFICATION

### Product identifier

**Product Name** PX 101MA COPPER GASKET SEALANT 9 OZ .

### Other means of identification

**Product Code** 80697

### 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, Ohio 44139 USA  
Telephone: 1-87-Permatex  
(866) 732-9502

#### 24-hour emergency phone number

Chem-Tel: 800-255-3924  
International Emergency:  
00+1+ 813-248-0585  
Contract Number: MIS0003453

#### May Also Be Distributed by:

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

**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)

Serious eye damage/eye irritation	Category 2
Carcinogenicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Extremely flammable aerosol	Category 1
Gases under pressure	Liquefied gas

### Label elements

#### **Emergency Overview**

#### Signal word

**Danger**

Causes serious eye irritation  
Suspected of causing cancer  
May cause drowsiness or dizziness  
Extremely flammable aerosol  
Pressurized container: May burst if heated

**Appearance** Copper**Physical state** Aerosol**Odor** Solvent**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  
 Wear eye/face protection  
 Avoid breathing dust/fume/gas/mist/vapors/spray  
 Use only outdoors or in a well-ventilated area

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention

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

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

**Precautionary Statements - Storage**

Store locked up  
 Protect from sunlight. Store in a well-ventilated place  
 Do not expose to temperatures exceeding 122 °F (50 °C)

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

The classification as a carcinogen or mutagen need not apply since it can be shown that the substance contains less than 0.1 % w/w 1,3-butadiene (EINECS No. 203-450-8)

The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (EINECS No 200-753-7).

Unknown acute toxicity

2.5 % of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
BUTANE	106-97-8	15 - 40
DICHLOROMETHANE	75-09-2	10 - 30
ACETONE	67-64-1	10 - 30
PROPANE	74-98-6	10 - 30
ETHYL ACETATE	141-78-6	3 - 7
COPPER	7440-50-8	1 - 5
SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPH.	64742-89-8	1 - 5

PROPYLENE OXIDE	75-56-9	<0.1
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#### 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 persists, call a physician. Take off contaminated clothing and wash 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>	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** 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

Do not use a solid water stream as it may scatter and spread fire

##### Specific hazards arising from the chemical

Extremely flammable. Contains gas under pressure; may explode if heated. Vapors may travel to source of ignition and flash back.

##### 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** ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Do not puncture or incinerate cans. Ensure adequate ventilation, especially in confined areas. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling. Use personal protective equipment as required.

**Other Information** Ventilate the area.

### 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** Eliminate all ignition sources if safe to do so. Ensure adequate ventilation. Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal. Use personal protective equipment as required.

**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. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Contents under pressure. Take precautionary measures against static discharges. Do not puncture or incinerate cans.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store locked up.

**Incompatible materials** Strong oxidizing agents, Alkalis

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
BUTANE 106-97-8	STEL: 1000 ppm explosion hazard	(vacated) TWA: 800 ppm (vacated) TWA: 1900 mg/m <sup>3</sup>	IDLH: 1600 ppm TWA: 800 ppm TWA: 1900 mg/m <sup>3</sup>
DICHLOROMETHANE 75-09-2	TWA: 50 ppm	TWA: 25 ppm (vacated) TWA: 500 ppm (vacated) STEL: 2000 ppm 5 min in any 3 h (vacated) Ceiling: 1000 ppm STEL: 125 ppm see 29 CFR 1910.1052	IDLH: 2300 ppm
ACETONE 67-64-1	STEL: 500 ppm TWA: 250 ppm	TWA: 1000 ppm TWA: 2400 mg/m <sup>3</sup> (vacated) TWA: 750 ppm (vacated) TWA: 1800 mg/m <sup>3</sup> (vacated) STEL: 2400 mg/m <sup>3</sup> The acetone STEL does not apply to the cellulose acetate fiber industry. It is in effect for all other sectors. (vacated) STEL: 1000 ppm	IDLH: 2500 ppm TWA: 250 ppm TWA: 590 mg/m <sup>3</sup>
PROPANE 74-98-6	: See Appendix F: Minimal Oxygen Content, explosion hazard	TWA: 1000 ppm TWA: 1800 mg/m <sup>3</sup> (vacated) TWA: 1000 ppm	IDLH: 2100 ppm TWA: 1000 ppm TWA: 1800 mg/m <sup>3</sup>

		(vacated) TWA: 1800 mg/m <sup>3</sup>	
ETHYL ACETATE 141-78-6	TWA: 400 ppm	TWA: 400 ppm TWA: 1400 mg/m <sup>3</sup> (vacated) TWA: 400 ppm (vacated) TWA: 1400 mg/m <sup>3</sup>	IDLH: 2000 ppm TWA: 400 ppm TWA: 1400 mg/m <sup>3</sup>
COPPER 7440-50-8	TWA: 0.2 mg/m <sup>3</sup> fume TWA: 1 mg/m <sup>3</sup> Cu dust and mist	TWA: 0.1 mg/m <sup>3</sup> fume TWA: 1 mg/m <sup>3</sup> dust and mist (vacated) TWA: 0.1 mg/m <sup>3</sup> Cu dust, fume, mist	IDLH: 100 mg/m <sup>3</sup> dust, fume and mist IDLH: 100 mg/m <sup>3</sup> Cu dust and mist TWA: 1 mg/m <sup>3</sup> dust and mist TWA: 0.1 mg/m <sup>3</sup> fume TWA: 1 mg/m <sup>3</sup> Cu dust and mist
PROPYLENE OXIDE 75-56-9	TWA: 2 ppm	TWA: 100 ppm TWA: 240 mg/m <sup>3</sup> (vacated) TWA: 20 ppm (vacated) TWA: 50 mg/m <sup>3</sup>	IDLH: 400 ppm

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**

**9.1. Information on basic physical and chemical properties**

**Physical state** Aerosol  
**Appearance** Copper  
**Odor** Solvent  
**Odor threshold** No information available

<u>Property</u>	<u>Values</u>
pH	No information available
Melting point / freezing point	No information available
Boiling point / boiling range	56 °C / 133 °F
Flash point	-104 °C / -156 °F
Evaporation rate	No information available
Flammability (solid, gas)	No information available
Flammability Limit in Air	
Upper flammability limit:	16.8%
Lower flammability limit:	8.7%
Vapor pressure	40 psig @ 21°C
Vapor density	No information available
Relative density	1.05
Water solubility	No information available
Solubility(ies)	No information available

**Remarks • Method**

Gives a flame projection at full valve opening or flashback at any degree of valve opening

<b>Partition coefficient</b>	No information available
<b>Autoignition temperature</b>	No information available
<b>Decomposition temperature</b>	No information available
<b>Kinematic viscosity</b>	No information available
<b>Dynamic viscosity</b>	No information available
<b>Explosive properties</b>	No information available
<b>Oxidizing properties</b>	No information available

**Other Information**

<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC Content (%)</b>	44.9%
<b>Density</b>	No information available
<b>Bulk density</b>	No information available
<b>SADT (self-accelerating decomposition temperature)</b>	No information available

## 10. STABILITY AND REACTIVITY

**Reactivity**

No information available

**Chemical stability**

Stable under normal conditions

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Heat, flames and sparks. Take precautionary measures against static discharges.

**Incompatible materials**

Strong oxidizing agents, Alkalis

**Hazardous Decomposition Products**

Carbon oxides

Hydrogen chloride

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

<b>Inhalation</b>	May cause irritation of respiratory tract. May cause drowsiness or dizziness.
<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.
<b>Ingestion</b>	Ingestion may cause irritation to mucous membranes.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
BUTANE 106-97-8	-	-	= 658 g/m <sup>3</sup> ( Rat ) 4 h
DICHLOROMETHANE 75-09-2	= 1600 mg/kg ( Rat )	-	= 53 mg/L ( Rat ) 6 h = 76000 mg/m <sup>3</sup> ( Rat ) 4 h
ACETONE 67-64-1	= 5800 mg/kg ( Rat )	> 15700 mg/kg ( Rabbit )	= 50100 mg/m <sup>3</sup> ( Rat ) 8 h
PROPANE 74-98-6	-	-	> 800000 ppm ( Rat ) 15 min
ETHYL ACETATE 141-78-6	= 5620 mg/kg ( Rat )	> 18000 mg/kg ( Rabbit ) > 20 mL/kg ( Rabbit )	= 4000 ppm ( Rat ) 4 h
SOLVENT NAPHTHA	-	= 3000 mg/kg ( Rabbit )	-

(PETROLEUM), LIGHT ALIPH. 64742-89-8			
PROPYLENE OXIDE 75-56-9	= 520 mg/kg ( Rat )	= 1244 mg/kg ( Rabbit )	= 0.948 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
DICHLOROMETHANE 75-09-2	A3	Group 2A	Reasonably Anticipated	X
PROPYLENE OXIDE 75-56-9	A3	Group 2B	Reasonably Anticipated	X

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - *Animal Carcinogen*

IARC (International Agency for Research on Cancer)

*Group 2A - Probably Carcinogenic to Humans*

*Group 2B - Possibly Carcinogenic to Humans*

NTP (National Toxicology Program)

*Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen*

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - *Present*

**Chronic toxicity** May cause adverse liver effects.

**Target Organ Effects** Central nervous system, Central Vascular System (CVS), Eyes, kidney, Liver, Respiratory system, Skin.

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

ATEmix (oral) 5387 mg/kg

ATEmix (dermal) 90022 mg/kg

ATEmix (inhalation-dust/mist) 334 mg/l

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

40.5 % 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
BUTANE 106-97-8	2.89
DICHLOROMETHANE 75-09-2	1.25
ACETONE 67-64-1	-0.24
PROPANE 74-98-6	2.3
ETHYL ACETATE 141-78-6	0.6

PROPYLENE OXIDE 75-56-9	0.08
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**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** D001

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
DICHLOROMETHANE 75-09-2	Category I - Volatiles	-	Toxic waste waste number F025 Waste description: Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.	-

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
DICHLOROMETHANE 75-09-2	Toxic
ACETONE 67-64-1	Ignitable
ETHYL ACETATE 141-78-6	Toxic Ignitable
COPPER 7440-50-8	Toxic
PROPYLENE OXIDE 75-56-9	Toxic Ignitable

**14. TRANSPORT INFORMATION**

**DOT**

**UN/ID No** UN 1950

**Proper shipping name:** Aerosols, Limited Quantity (LQ)

**Hazard Class** 2.1

**Emergency Response Guide Number** 126

**IATA**



UN/ID No UN 1950  
 Proper shipping name: Aerosols, flammable  
 Hazard Class 2.1  
 ERG Code 10L

**IMDG**

UN/ID No UN 1950  
 Proper shipping name: Aerosols, Limited Quantity (LQ)  
 Hazard Class 2.1  
 EmS-No F-D, S-U

**15. REGULATORY INFORMATION****International Inventories**

TSCA Complies  
 DSL/NDSL Complies  
 EINECS/ELINCS Complies  
 ENCS Not determined  
 IECSC Not determined  
 KECL Not determined  
 PICCS Not determined  
 AICS Not determined

**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 %
DICHLOROMETHANE - 75-09-2	0.1
COPPER - 7440-50-8	1.0
PROPYLENE OXIDE - 75-56-9	0.1

**SARA 311/312 Hazard Categories**

Acute health hazard Yes  
 Chronic Health Hazard Yes  
 Fire hazard Yes  
 Sudden release of pressure hazard No  
 Reactive Hazard No

**CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
DICHLOROMETHANE 75-09-2	-	X	X	-
COPPER 7440-50-8	-	X	X	-
PROPYLENE OXIDE 75-56-9	100 lb	-	-	X

**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)
DICHLOROMETHANE 75-09-2	1000 lb 1 lb	-	RQ 1000 lb final RQ RQ 454 kg final RQ RQ 1 lb final RQ RQ 0.454 kg final RQ
ACETONE 67-64-1	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
ETHYL ACETATE 141-78-6	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
COPPER 7440-50-8	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
PROPYLENE OXIDE 75-56-9	100 lb	100 lb	RQ 100 lb final RQ RQ 45.4 kg final RQ

**US State Regulations****California Proposition 65**

WARNING: This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm

Chemical Name	California Proposition 65
DICHLOROMETHANE - 75-09-2	Carcinogen
PROPYLENE OXIDE - 75-56-9	Carcinogen

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
BUTANE 106-97-8	X	X	X
ACETONE 67-64-1	X	X	X
DICHLOROMETHANE 75-09-2	X	X	X
PROPANE 74-98-6	X	X	X
ETHYL ACETATE 141-78-6	X	X	X
COPPER 7440-50-8	X	X	X
PROPYLENE OXIDE 75-56-9	X	X	X

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

**WHMIS Hazard Class**

A Compressed gases, B5 - Flammable aerosol, D2B - Toxic materials

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

<b>NFPA</b>	<b>Health hazards</b> 2	<b>Flammability</b> 3	<b>Instability</b> 0	-
<b>HMIS</b>	<b>Health hazards</b> 2	<b>Flammability</b> 3	<b>Physical hazards</b> 0	<b>Personal protection</b> B

NFPA (National Fire Protection Association)

HMIS (Hazardous Material Information System)

**Revision Date** 06-Feb-2019

**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

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materials or in any process, unless specified in the text.

**End of Safety Data Sheet**