



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 |

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 persists, call a physician. Take off contaminated clothing and wash 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 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 (CO₂), 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 ³ | IDLH: 1600 ppm TWA: 800 ppm TWA: 1900 mg/m ³ |
| 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 ³ (vacated) TWA: 750 ppm (vacated) TWA: 1800 mg/m ³ (vacated) STEL: 2400 mg/m ³ 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 ³ |
| PROPANE 74-98-6 | : See Appendix F: Minimal Oxygen Content, explosion hazard | TWA: 1000 ppm TWA: 1800 mg/m ³ (vacated) TWA: 1000 ppm (vacated) TWA: 1800 mg/m ³ | IDLH: 2100 ppm TWA: 1000 ppm TWA: 1800 mg/m ³ |

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

| Property | Values |
|--------------------------------|--------------------------|
| 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 |
| Partition coefficient | No information available |

Remarks • Method

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

| | |
|----------------------------------|--------------------------|
| 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 (%) | 44.9% |
| Density | No information available |
| Bulk density | No information available |
| SADT (self-accelerating decomposition temperature) | 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

| | |
|---------------------|--|
| Inhalation | May cause irritation of respiratory tract. May cause drowsiness or dizziness. |
| 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. |
| Ingestion | Ingestion may cause irritation to mucous membranes. |

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|--|----------------------|--|---|
| BUTANE 106-97-8 | - | - | = 658 g/m ³ (Rat) 4 h |
| DICHLOROMETHANE 75-09-2 | = 1600 mg/kg (Rat) | - | = 53 mg/L (Rat) 6 h = 76000 mg/m ³ (Rat) 4 h |
| ACETONE 67-64-1 | = 5800 mg/kg (Rat) | > 15700 mg/kg (Rabbit) | = 50100 mg/m ³ (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 (PETROLEUM), LIGHT ALIPH. | - | = 3000 mg/kg (Rabbit) | - |

| | | | |
|----------------------------|---------------------|-------------------------|--------------------------|
| 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 | 0.08 |

| | |
|---------|--|
| 75-56-9 | |
|---------|--|

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, Containing substances in Division 6.1, Packing Group III, Limited Quantity (LQ)
Hazard Class 2.1, 6.1
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

| | | | | |
|-------------|------------------|----------------|--------------------|-----------------------|
| NFPA | Health hazards 2 | Flammability 3 | Instability 0 | - |
| HMIS | Health hazards 2 | Flammability 3 | Physical hazards 0 | Personal protection B |

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

Revision Date 06-Feb-2019

Disclaimer

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End of Safety Data Sheet