



SAFETY DATA SHEET

Revision Date 14-Mar-2016

Version 4

1. IDENTIFICATION

Product identifier

Product Name 101MA COPPER SPRAY-A-GASKET 9 OZ

Other means of identification

Product Code 80697

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Flammable Aerosol, 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

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

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

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** Liquid 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 if it can be shown that the substance contains less than 0.1 % w/w 1,3-butadiene (EINECS No. 203-450-8). If the substance is not classified as a carcinogen or mutagen, at least the S-phrases (2-)9-16 (Table 3.2) should apply. This note applies only to certain complex oil-derived substances in Part 3

Unknown acute toxicity

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

substance(s)

Chemical Name	CAS No	Weight-%	Trade Secret
PETROLEUM GASES, LIQUEFIED, SWEETENED	68476-86-8	30 - 60	*
ACETONE	67-64-1	15 - 40	*
DICHLOROMETHANE	75-09-2	10 - 30	*
ETHYL ACETATE	141-78-6	3 - 7	*
SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPH.	64742-89-8	1 - 5	*
COPPER	7440-50-8	1 - 5	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

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. 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 effects, both acute and delayed

Symptoms	See section 2 for more information.
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Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES**Suitable extinguishing media**

Carbon dioxide (CO₂), Dry chemical, Foam

Unsuitable extinguishing media

None.

Specific hazards arising from the chemical

Extremely flammable aerosol. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

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.
Other Information	ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Environmental precautions

Environmental precautions	Do not flush into surface water or sanitary sewer system. See Section 12 for additional ecological Information.
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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.
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.
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Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Do not expose to temperatures exceeding 50 °C/122 °F. Store locked up.
Incompatible materials	Strong oxidizing agents, Alkalies

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters****Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
ACETONE 67-64-1	STEL: 750 ppm TWA: 500 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
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
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: 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 Cu dust and mist TWA: 1 mg/m ³ Cu dust and mist

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).
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Appropriate engineering controls

Engineering Controls	Showers Eyewash stations Ventilation systems
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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**

Physical state	Liquid; Aerosol
Appearance	Copper
Odor	Solvent
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	> 38 °C / >100 °F	
Flash point	No information available	Gives a flame projection at full valve opening or flashback at any degree of valve opening Butyl acetate = 1
Evaporation rate	>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	Not determined	
Vapor density	>1	Air = 1
Relative density	1.05	
Water solubility	Negligible	
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 (%)	44.9%
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

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

Incompatible materials

Strong oxidizing agents, Alkalies

Hazardous Decomposition Products

Carbon oxides

Hydrogen chloride

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure**

Inhalation	Vapors may be irritating to eyes, nose, throat, and lungs. May cause central nervous system depression with nausea, headache, dizziness, vomiting, and incoordination.
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
ACETONE 67-64-1	= 5800 mg/kg (Rat)	-	= 50100 mg/m ³ (Rat) 8 h
DICHLOROMETHANE 75-09-2	= 1600 mg/kg (Rat)	-	= 53 mg/L (Rat) 6 h = 76000 mg/m ³ (Rat) 4 h
ETHYL ACETATE 141-78-6	= 5620 mg/kg (Rat)	> 18000 mg/kg (Rabbit) > 20 mL/kg (Rabbit)	-
SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPH. 64742-89-8	-	= 3000 mg/kg (Rabbit)	-

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

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 2A - Probably 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, Lungs.

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

Chemical Name	Algae/aquatic plants	Fish	Crustacea
ACETONE 67-64-1	-	4.74 - 6.33: 96 h Oncorhynchus mykiss mg/L LC50 6210 - 8120: 96 h Pimephales promelas mg/L LC50 static 8300: 96 h Lepomis macrochirus mg/L LC50	10294 - 17704: 48 h Daphnia magna mg/L EC50 Static 12600 - 12700: 48 h Daphnia magna mg/L EC50
DICHLOROMETHANE 75-09-2	500: 96 h Pseudokirchneriella subcapitata mg/L EC50 500: 72 h Pseudokirchneriella subcapitata mg/L EC50	140.8 - 277.8: 96 h Pimephales promelas mg/L LC50 flow-through 262 - 855: 96 h Pimephales promelas mg/L LC50 static 193: 96 h Lepomis macrochirus mg/L LC50 static 193: 96 h Lepomis macrochirus mg/L LC50 flow-through	1532 - 1847: 48 h Daphnia magna mg/L EC50 Static 190: 48 h Daphnia magna mg/L EC50
ETHYL ACETATE 141-78-6	3300: 48 h Desmodesmus subspicatus mg/L EC50	352 - 500: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 220 - 250: 96 h Pimephales promelas mg/L LC50 flow-through 484: 96 h Oncorhynchus mykiss mg/L LC50 flow-through	560: 48 h Daphnia magna mg/L EC50 Static
SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPH. 64742-89-8	4700: 72 h Pseudokirchneriella subcapitata mg/L EC50	-	-
COPPER 7440-50-8	0.0426 - 0.0535: 72 h Pseudokirchneriella subcapitata mg/L EC50 static 0.031 - 0.054: 96 h Pseudokirchneriella subcapitata mg/L EC50 static	0.2: 96 h Pimephales promelas mg/L LC50 flow-through 0.052: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 1.25: 96 h Lepomis macrochirus mg/L LC50 static 0.3: 96 h Cyprinus carpio mg/L LC50 semi-static 0.8: 96 h Cyprinus carpio mg/L LC50 static 0.112: 96 h Poecilia reticulata mg/L LC50 flow-through 0.0068 - 0.0156: 96 h Pimephales promelas mg/L LC50 0.3: 96 h Pimephales promelas mg/L LC50 static	0.03: 48 h Daphnia magna mg/L EC50 Static

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility

No information available.

Chemical Name	Partition coefficient
PETROLEUM GASES, LIQUEFIED, SWEETENED 68476-86-8	<=2.8
ACETONE 67-64-1	-0.24
DICHLOROMETHANE 75-09-2	1.25
ETHYL ACETATE 141-78-6	0.6

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, F002

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
ACETONE 67-64-1	-	Included in waste stream: F039	-	U002
DICHLOROMETHANE 75-09-2	-	Included in waste streams: F001, F002, F024, F025, F039, K009, K010, K156, K157, K158	-	U080
ETHYL ACETATE 141-78-6	-	Included in waste stream: F039	-	U112

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

14. TRANSPORT INFORMATION**DOT**

UN/ID no UN 1950
Proper shipping name: Aerosols, Limited Quantity (LQ)
Hazard Class 2.1
Emergency Response Guide 126

Number**IATA**

UN/ID no UN 1950
 Proper shipping name: Aerosols, flammable, containing, substances, Division, 6.1, Packing group III
 Hazard Class 2.1
 Subsidiary hazard class 6.1
 ERG Code 10P

IMDG

UN/ID no UN 1950
 Proper shipping name: Aerosols
 Hazard Class 2.1
 EmS-No F-D, S-U

15. REGULATORY INFORMATION**International Inventories**

TSCA Complies
 DSL/NDL Complies
 EINECS/ELINCS Complies
 ENCS Not Listed.
 IECSC Complies
 KECL Complies
 PICCS Complies
 AICS Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
 DSL/NDL - 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

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	-

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)
ACETONE 67-64-1	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
DICHLOROMETHANE 75-09-2	1 lb	-	RQ 1 lb final RQ RQ 0.454 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

US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65
DICHLOROMETHANE - 75-09-2	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
ACETONE 67-64-1	X	X	X
DICHLOROMETHANE 75-09-2	X	X	X
ETHYL ACETATE 141-78-6	X	X	X
COPPER 7440-50-8	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 3	Flammability 3	Instability 0	-
HMIS	Health hazards 3	Flammability 3	Physical hazards 0	Personal protection B

NFPA (National Fire Protection Association)

HMIS (Hazardous Material Information System)

Revision Date 14-Mar-2016

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