

Description

The 8472 Penetrating Oil has excellent lubricant, creep, and penetrant characteristics and provides corrosion resistance as strong as any penetrant on the market. It is non-volatile, so it does not dry quickly and contains zero VOC's. As well, unlike some penetrants, it is safe on plastics, seals, and painted surfaces.

Applications & Usages

Common uses include releasing rusted bolts, nuts, screws, fasteners, pulleys, scales, tools, and other frozen metal mechanisms; general industrial maintenance and repair work, lubricating close fitting parts, displacing moisture, maintaining garden and yard equipment, household repair tasks, maintaining boating equipment and any mechanical equipment regularly subject to moist or wet conditions.

Superior Characteristics

Penetrates	Creeps into tiny spaces and quickly dissolves rust to free corroded nuts, bolts, and frozen mechanical parts
Cleans	Removes tar, sap, oils, greases, adhesives, label residues, and more
Lubricates	Minimizes friction and wear with a low viscosity, long lasting oil blend, leading to greater machine efficiency
Protects	Provides extreme protection against rust and corrosion with high tech corrosion inhibitors and leaves a preservative film that protects against abrasive particles like dirt, sand, and salt
Displaces Moisture	Repels water due to its high hydrophobicity
Improves	Reduces friction and wear leading to greater machine efficiency
Safe on parts	Safe on seals, plastics, rubber, paint, and coatings
Environmentally safe	No VOC's, CFC's or Chlorinated Solvents
Human safe	Non toxic
Silicone free	Will not contaminate delicate electronic circuits with silicone particles

Work Schedule*

Properties	Value
Shelf Life @ 23 °C [73 °F]	indeterminate
Working Life	>5 years
Storage Temperature	5 to 45°C [41 to 113 °F]

*Shelf life is not a function of the product itself but of its container.

Service Ranges

Properties	Value
Service Temperature**	-20 to +100 °C [-4 to +212 °F]
Max coverage per can for 25 µm [0.001"]	<8 870 000 cm ² [<9 547 ft ²]

**Propellant limits the lower temperature range, and the flash point the upper range. The actual operational range of the oil is wider than stated.

Properties

<i>Physical Property</i>	<i>Method</i>	<i>Value</i>
Odor	—	Slight hydrocarbon
Color		Clear yellow tint
Viscosity at 23 °C [77 °F]	Brookfield viscometer	7.0 cP
Specific gravity at 23 °C [77 °F]	ASTM D 287	0.83
Flash Point	ASTM D 3278	66 °C [151 °F]
Autoignition		218 °C
Boiling Point		246 °C
Hydrophobic		Yes
Solubility in Water		Non soluble
Surface Tension		20-30 dyne/sec*

* Estimated value based on components

Compatibilities

The 8472 is designed not to damage the base metals nor most paints and plastics. Early estimates of compatibility are provided in the Chemical Compatibility table.

<i>Chemical Compatibility*</i>	<i>Method</i>	<i>Value</i>
Metals	—	recommended
Woods	—	recommended
Paints (epoxy, phenolic, alkyd, urethane, latex)	—	safe
Paints (acrylic, latex, vinyl, polyurethanes)	—	safe
Plastics (nylon, teflon, polyacetal, polypropylene)	—	safe
Plastics (Polyurethanes, polyethylene, polysulfone)	—	safe
Rubbers (viton, NBR, fluorosilicone, polyester)	—	safe
Rubbers (nitrile, silicone, epichlorohydrin, EPDM)	—	safe
Rubbers (natural, neoprene, butyl, SBR)	—	<i>not estimated</i>
Polycarbonate, ABS, polyvinyl chloride	24 h; >24 h	safe
Styrofoam	12 h; 24 h	safe; fail

* Estimated values based on components and early test results.

Packaging and Supporting Products

Product Availability

- Cat. No. 8472-450G (20 oz) Aerosol
- Cat. No. 8472-4L (1 gal) / 8472-20L (5 gal) Liquid

Health, Safety, and Environmental Awareness

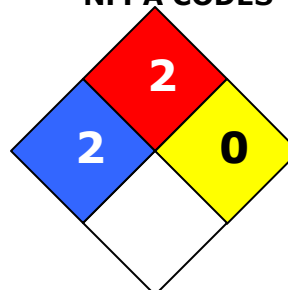
Please see the 8472 **Material Safety Data Sheet** (MSDS) for more details on transportation, storage, handling and other security guidelines.

Environmental Impact: The 8472 formulation is designed for commercial and domestic uses. It has no volatile organic content. It contains petroleum products; avoid runoff into storm and sewer drains.

HMIS RATING

HEALTH:	2
FLAMMABILITY:	2
PHYSICAL HAZARD:	0
PERSONAL PROTECTION:	0

NFPA CODES



Health and Safety: The 8472 penetrant and lubricating oil is moderately flammable and should be kept away from flames, especially near or above the flash point of 66 °C [151 °F]. Avoid breathing in spray mist or fumes (if heated). Avoid contact with the eyes. Do not ingest. The product provides no known risk of cancer, no known risk to fetus, no known sterility risk, and has no known mutagenicity effect. Wash your hands after using.

NOTE: This product is not intended to be heated, and it should be used at room temperature. If you need to solder or heat a lubricated part, please wipe the zone with a clean cloth to remove the lubricating oil.

Aerosol Application Instructions

Follow the procedure below for best results.

To lubricate, prevent rust, and protect large surfaces against water

1. Shake thoroughly.
2. At a distance of 20 to 25 cm (8 to 10 inches), spray a light oil coat.

To penetrate and lubricate seized or moving parts

1. Shake thoroughly.
2. Use extension straw for spot applications or for hard to reach areas.
3. Soak the area. Tap metal joint with hammer to speed up penetration.
4. Wait minutes to one or more hours (depending on level of rust)
5. Reapply as necessary.

To clean tar, sap, greases, adhesives, and label residues

1. Shake thoroughly.
2. Spray residues directly or use an imbibed clean cloth.
3. Wait a few minutes to allow absorption deep into the residue.
4. Wipe with cloth.



ISO 9001 Registered Quality System.
Burlington, Ontario, Canada QMI File # 004008

Penetrating Oil 8472 Technical Data Sheet

8472-Aerosol

Technical Support

Contact us regarding any questions, improvement suggestions, or problems with this product. Application notes, instructions, and FAQs are located at www.mgchemicals.com.

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Disclaimer

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