SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: US OSHA Hazard Communication Standard (29 CFR 1910.1200) and Canada WHMIS which includes the amended Hazardous Products Act (HPA) and the Hazardous Products Regulation (HPR)

Revision Date 04-Mar-2025 **Version** 2

1. Identification

Product identifier

Product Name COPPER ANTI-SEIZE LUBRICANT 16 OZ.

Other means of identification

Product Code 31163

Synonyms CAN Item Number 75454

Recommended use of the chemical and restrictions on use

Recommended Use Lubricant

Restrictions on use No information available

Details of the supplier of the safety data sheet

Manufacturer Address
ITW Permatex, Inc.
6875 Parkland Blvd.
Solon, Ohio 44139 USA
Telephone: 1-87-Permatex
(866) 732-9502

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

Emergency telephone number

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

24-hour emergency phone number No information available

2. Hazard(s) identification

Classification

Carcinogenicity	Category 1B

Label elements

Contains MAGNESIUM SILICATE

Danger

Hazard statements
May cause cancer.

Precautionary Statements - Prevention
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear protective gloves, protective clothing, eye protection and face protection.
Precautionary Statements - Response
IF exposed or concerned: Get medical advice/attention.

Precautionary Statements - Storage
Store locked up.
Precautionary Statements - Disposal
Dispose of contents and container in accordance with local, regional, national, and international regulations as applicable.

42.25 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.
42.25 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.
99.75 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).
99.75 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).
97.25 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Other Information
Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

Synonyms CAN Item Number 75454.

Chemical name	CAS No.	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
MAGNESIUM SILICATE	14807-96-6	10-30%	-	-
LIMESTONE	1317-65-3	10-30%	-	-
COPPER	7440-50-8	3-7%	-	-
GRAPHITE	7782-42-5	1-5%	-	-
AMORPHOUS SILICA	7631-86-9	1-5%	-	-

4. First-aid measures

Description of first aid measures

General advice IF exposed or concerned: Get medical advice/attention.

Inhalation Remove to fresh air.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin contact Wash skin with soap and water.

Ingestion Rinse mouth.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Effects of Exposure May cause cancer.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Small Fire In case of fire, use water spray, foam, dry chemical, or CO2.
Large Fire In case of fire, use water spray, foam, dry chemical, or CO2.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the chemical No information available.

Hazardous combustion products No information available.

Explosion data
Sensitivity to mechanical impact None.
Sensitivity to static discharge None.

Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

Other information Refer to protective measures listed in Sections 7 and 8.

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 Pick up and transfer to properly labeled containers.

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 contact with skin, eyes or clothing.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

8. Exposure controls/personal protection

Control Parameters
Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
MAGNESIUM SILICATE 14807-96-6	TWA: 2 mg/m³ respirable particulate matter particulate matter containing no Asbestos and <1% Crystalline silica	TWA: 20 mppcf if 1% Quartz or more, use Quartz limit (vacated) TWA: 2 mg/m³ respirable dust <1% Crystalline silica, containing no Asbestos TWA: 20 mppcf if 1% Quartz or more, use Quartz limit	TWA: 2 mg/m³; containing no Asbestos and <1% Quartz respirable dust IDLH: 1000 mg/m³
LIMESTONE 1317-65-3	-	TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction (vacated) TWA: 15 mg/m³ total dust (vacated) TWA: 5 mg/m³ respirable fraction	TWA: 10 mg/m³; total dust TWA: 5 mg/m³; respirable dust
COPPER 7440-50-8	TWA: 0.2 mg/m³ fume	TWA: 0.1 mg/m³ fume TWA: 1 mg/m³ dust and mist (vacated) TWA: 0.1 mg/m³ Cu dust, fume, mist	TWA: 1 mg/m³; dust and mist TWA: 0.1 mg/m³; fume IDLH: 100 mg/m³ dust, fume and mist
GRAPHITE 7782-42-5	TWA: 2 mg/m³ respirable particulate matter all forms except graphite fibers	TWA: 15 mg/m³ total dust synthetic TWA: 5 mg/m³ respirable fraction synthetic TWA: 15 mppcf respirable dust natural (vacated) TWA: 2.5 mg/m³ respirable dust natural (vacated) TWA: 10 mg/m³ total dust synthetic (vacated) TWA: 5 mg/m³ respirable fraction synthetic TWA: 15 mppcf natural	TWA: 2.5 mg/m³; natural respirable dust IDLH: 1250 mg/m³
AMORPHOUS SILICA 7631-86-9	-	(vacated) TWA: 6 mg/m³ <1% Crystalline silica TWA: 20 mppcf : (80)/(% SiO2) mg/m³ TWA	TWA: 6 mg/m³; IDLH: 3000 mg/m³

Chemical name	Alberta	British Columbia	Ontario	Quebec
MAGNESIUM SILICATE 14807-96-6	TWA: 2 mg/m³; respirable particulate	TWA: 2 mg/m³; respirable particulate	TWA: 2 mg/m³; respirable fraction	TWAEV: 2 mg/m³; respirable dust
LIMESTONE 1317-65-3	TWA: 10 mg/m³;	TWA: 10 mg/m³; total dust TWA: 3 mg/m³; respirable fraction	-	TWAEV: 10 mg/m³; total dust

		STEL: 20 mg/m³;		
COPPER 7440-50-8	TWA: 0.2 mg/m³; fume TWA: 1 mg/m³; dust and mist	TWA: 1 mg/m³; dust and mist TWA: 0.2 mg/m³; fume	TWA: 0.2 mg/m³; fume TWA: 1 mg/m³; dust and mist	TWAEV: 0.2 mg/m³; fume TWAEV: 1 mg/m³; dust and mist
GRAPHITE 7782-42-5	TWA: 2 mg/m³; respirable	TWA: 2 mg/m³; respirable	TWA: 2 mg/m³; respirable particulate matter	TWAEV: 2 mg/m³; respirable dust

Chemical name	Manitoba	New Brunswick	Newfoundland and Labrador	Nova Scotia
MAGNESIUM SILICATE	TWA: 2 mg/m³; particulate matter, respirable particulate matter	TWA: 2 mg/m³;	TWA: 2 mg/m³; particulate matter, respirable particulate matter	TWA: 2 mg/m³; particulate matter, respirable particulate matter
COPPER	TWA: 0.2 mg/m³; fume	TWA: 0.2 mg/m³; fume	TWA: 0.2 mg/m³; fume	TWA: 0.2 mg/m³; fume
GRAPHITE	TWA: 2 mg/m³; respirable particulate matter	TWA: 2 mg/m³; respirable fraction	TWA: 2 mg/m³; respirable particulate matter	TWA: 2 mg/m³; respirable particulate matter

Chemical name	Nunavut	Prince Edward Island	Saskatchewan	Yukon
MAGNESIUM SILICATE	TWA: 2 mg/m³; respirable fraction	TWA: 2 mg/m³; particulate matter, respirable particulate matter	TWA: 2 mg/m³; respirable fraction	TWA: 20 mppcf;
LIMESTONE	TWA: 10 mg/m³; STEL: 20 mg/m³;		TWA: 10 mg/m³; STEL: 20 mg/m³;	TWA: 30 mppcf; TWA: 10 mg/m³; STEL: 20 mg/m³;
COPPER	TWA: 0.2 mg/m³; fume TWA: 1 mg/m³; dust and mist STEL: 3 mg/m³; dust and mist STEL: 0.6 mg/m³; fume	TWA: 0.2 mg/m³; fume	TWA: 0.2 mg/m³; fume TWA: 1 mg/m³; dust and mist STEL: 0.6 mg/m³; fume STEL: 3 mg/m³; dust and mist	TWA: 0.2 mg/m³; fume TWA: 1 mg/m³; dust and mist STEL: 0.2 mg/m³; fume STEL: 2 mg/m³; dust and mist
GRAPHITE	TWA: 2 mg/m³; respirable fraction STEL: 4 mg/m³; respirable fraction	TWA: 2 mg/m³; respirable particulate matter	TWA: 2 mg/m³; respirable fraction STEL: 4 mg/m³; respirable fraction	TWA: 20 mppcf; TWA: 30 mppcf; TWA: 10 mg/m³;
AMORPHOUS SILICA				TWA: 300 particle/mL; TWA: 20 mppcf; TWA: 2 mg/m³; respirable mass

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).

Hand protection Wear suitable gloves.

Skin and body protection Wear suitable protective clothing.

Respiratory protection Use appropriate respiratory protection.

General hygiene considerations Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

Thermal hazards No information available.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Paste / Gel Liquid
Appearance	Paste
Color	Copper
Odor	Petroleum
Odor threshold	No information available

Property	**Values**	**Remarks • Method**
pH	No data available	
Melting point / freezing point	No data available	
Boiling point / boiling range	No data available	
Flash point	216 °C / 420.8 °F	
Evaporation rate	Not applicable	Butyl acetate = 1
Flammability (solid, gas)	No data available	
Flammability Limit in Air		
Upper flammability limit:	No data available	
Lower flammability limit:	No data available	
Vapor pressure	No data available	
Vapor density	No data available	Air = 1
Relative density	1.21	
Water solubility	Insoluble in water	
Solubility(ies)	No data available	
Partition coefficient	No data available	
Autoignition temperature	No data available	
Decomposition temperature	No data available	
Kinematic viscosity	No data available	
Dynamic viscosity	No data available	
Particle characteristics		
Particle Size	No data available	
Particle Size Distribution	No data available	

Other information

Explosive properties	No information available
Oxidizing properties	No information available
Softening point	No information available
Molecular weight	No information available
VOC content	0
Density	No information available
Bulk density	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.

Hazardous polymerization No information available.

Conditions to avoid None known based on information supplied.

Incompatible materials None known based on information supplied.

Hazardous decomposition products None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available.

Eye contact Specific test data for the substance or mixture is not available.

Skin contact Specific test data for the substance or mixture is not available.

Ingestion Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Acute toxicity .

Numerical measures of toxicity

The following ATE values have been calculated for the mixture

ATEmix (oral) 14,498.70 mg/kg
ATEmix (dermal) 5,021.70 mg/kg
ATEmix (inhalation-gas) 99,999.00 ppm
ATEmix (inhalation-vapor) 99,999.00 mg/l
ATEmix (inhalation-dust/mist) 5.51 mg/l

42.25 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
42.25 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
99.75 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
99.75 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
97.25 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
COPPER 7440-50-8	-	-	> 5.11 mg/L (Rat) 4 h
GRAPHITE 7782-42-5	-	-	> 2000 mg/m³ (Rat) 4 h
AMORPHOUS SILICA 7631-86-9	= 7900 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	> 5.01 mg/L (Rat) 4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity Contains a known or suspected carcinogen. Classification based on data available for ingredients. May cause cancer.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
MAGNESIUM SILICATE 14807-96-6	A4 - Not Classifiable as a Human Carcinogen	Group 2A - Probably carcinogenic to humans	-	Present
AMORPHOUS SILICA 7631-86-9	-	Group 3 - Unclassifiable as to carcinogenicity in humans	-	-

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)
A2 - Suspected human carcinogen
IARC (International Agency for Research on Cancer)
Group 1 - Carcinogenic to humans
Group 2A - Probably carcinogenic to humans
Group 3 - Not classifiable as to carcinogenicity in humans
NTP (National Toxicology Program)
Known - Known Carcinogen
Occupational Safety and Health Administration of the US Department of Labor
X - Present

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

12. Ecological information

Ecotoxicity Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
MAGNESIUM SILICATE 14807-96-6	-	LC50: >100g/L (96h, Brachydanio rerio)	-	-
COPPER 7440-50-8	EC50: 0.0426 - 0.0535mg/L (72h, Pseudokirchneriella subcapitata) EC50: 0.031 - 0.054mg/L (96h, Pseudokirchneriella subcapitata)	LC50: 0.0068 - 0.0156mg/L (96h, Pimephales promelas) LC50: <0.3mg/L (96h, Pimephales promelas) LC50: =0.2mg/L (96h, Pimephales promelas) LC50: =0.052mg/L (96h, Oncorhynchus mykiss) LC50: =1.25mg/L (96h, Lepomis macrochirus) LC50: =0.3mg/L (96h, Cyprinus carpio) LC50: =0.8mg/L (96h, Cyprinus carpio) LC50: =0.112mg/L (96h, Poecilia reticulata)	-	EC50: =0.03mg/L (48h, Daphnia magna)
GRAPHITE 7782-42-5	-	LC50: >100mg/L (96h, Danio rerio)	-	-
AMORPHOUS SILICA 7631-86-9	EC50: =440mg/L (72h, Pseudokirchneriella	LC50: =5000mg/L (96h, Brachydanio rerio)	-	EC50: =7600mg/L (48h, Ceriodaphnia dubia)

	subcapitata)			

Persistence and degradability No information available.

Bioaccumulation There is no data for this product.

Other adverse effects No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

US EPA Waste Number Waste designations and classifications should be determined by the end user based on the application for which the product was used.

14. Transport information

DOT Not regulated

TDG Not regulated

MEX Not regulated

IATA

UN number or ID number	UN3077
UN proper shipping name	Environmentally hazardous substance, solid, n.o.s.
Transport hazard class(es)	9
Packing group	III
ERG Code	9L
Special Provisions	A97, A158, A179, A197, A215
Description	UN3077, Environmentally hazardous substance, solid, n.o.s. (COPPER), 9, III

IMDG

UN number or ID number	UN3077
UN proper shipping name	Environmentally hazardous substance, solid, n.o.s.
Transport hazard class(es)	9
Packing group	III
EmS-No.	F-A, S-F
Special Provisions	274, 335, 375, 966, 967, 969
Description	UN3077, Environmentally hazardous substance, solid, n.o.s. (COPPER), 9, III, Limited Quantity, Marine pollutant

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Does not comply
IECSC	Complies
KECI	Complies
PICCS	Complies
AICS	Complies
NZIoC	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 Chemicals Inventory
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances
NZIoC - New Zealand Inventory of Chemicals

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 %
COPPER - 7440-50-8	1.0

SARA 311/312 Hazard Categories
Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

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
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	Extremely Hazardous Substances RQs	Reportable Quantity (RQ)
COPPER 7440-50-8	5000 lb / kg (final RQ)	-	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
AMORPHOUS SILICA - 7631-86-9	*Carcinogen

*The asterisked chemical(s) listed are not subject to Proposition 65 because they are not airborne in the finished product

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
MAGNESIUM SILICATE 14807-96-6	X	X	X
LIMESTONE 1317-65-3	X	X	X
COPPER 7440-50-8	X	X	X
AMORPHOUS SILICA 7631-86-9	-	X	X
GRAPHITE 7782-42-5	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA	**Health hazards** 2	**Flammability** 1	**Instability** 0	**Special hazards** -
HMIS	**Health hazards** *	**Flammability** 1	**Physical hazards** 0	**Personal protection** X

Chronic Hazard Star Legend ** = Chronic Health Hazard*

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend
SVHC: Substances of Very High Concern for Authorization:
PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances
vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances
STOT: Specific Target Organ Toxicity
ATE: Acute Toxicity Estimate
LC50: 50% Lethal Concentration
LD50: 50% Lethal Dose

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
+	Sensitizers		

Key literature references and sources for data used to compile the SDS
U.S. Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
U.S. Environmental Protection Agency
Acute Exposure Guideline Level(s) (AEGL(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
Japan National Institute of Technology and Evaluation (NITE)
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine’s PubMed database (NLM PUBMED)
U.S. National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
International Organization for Economic Co-operation and Development (OECD) Environment, Health, and Safety Publications
International Organization for Economic Co-operation and Development (OECD) High Production Volume Chemicals Program
International Organization for Economic Co-operation and Development (OECD) Screening Information Data Set

United Nations World Health Organization (WHO)

Revision Date 04-Mar-2025

Revision Note No information available.

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.