

Revision Date 27-Jan-2016

SAFETY DATA SHEET

Version 3

1. IDENTIFICATION

| Product identifier Product Name | COPPER ANTI-SEIZE LUBRICANT 16 OZ. |
|---|--|
| <u>Other means of identification</u> Product Code Synonyms | 31163 None |
| Recommended use of the chemical | and restrictions on use |
| Recommended Use | Lubricant |
| Uses advised against | No information available |
| Details of the supplier of the safety Manufacturer Address ITW Permatex 6875 Parkland Blvd. Solon, OH 44139 USA | <u>Distributor</u> ITW Permatex Canada 35 Brownridge Road, Unit 1 Halton Hills, ON Canada L7G 0C6 |
| Company Phone Number | Telephone: (800) 924-6994 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)

NOTE: This product is a consumer product and is labeled in accordance with the US Consumer Product Safety Commission regulations which take precedence over OSHA Hazard Communication labeling. The actual container label will not include the label elements below. The labeling below applies to industrial/professional products.

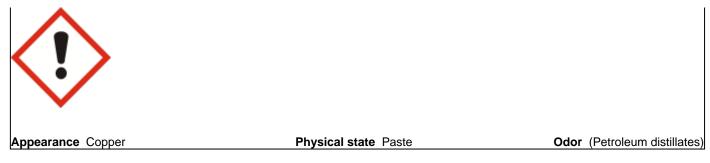
| Acute toxicity - Oral | Category 4 |
|-----------------------|------------|
| | |

Label elements

Emergency Overview

Warning

Harmful if swallowed



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell Rinse mouth

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed

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 need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346. This note applies only to certain complex oil derived substances in Annex I

Unknown acute toxicity

31.7415 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

substance(s)

| Chemical Name | CAS No | Weight-% | Trade Secret |
|---|------------|----------|--------------|
| DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTHENIC | 64742-52-5 | 30 - 60 | * |
| COPPER | 7440-50-8 | 10 - 30 | * |
| CALCIUM OXIDE | 1305-78-8 | 10 - 30 | * |
| GRAPHITE | 7782-42-5 | 5 - 10 | * |
| MINERAL OIL | 8042-47-5 | 5 - 10 | * |

*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:. Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. |
| Self-protection of the first aider | Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. |
| Most important symptoms and effe | cts, both acute and delayed |
| Symptoms | See section 2 for more information. |
| Indication of any immediate medica | al 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 None. | |
| Specific hazards arising from the c None in particular. | hemical |
| <u>Explosion data</u> Sensitivity to Mechanical Impact Sensitivity to Static Discharge | None. None. |
| Protective equipment and precaution As in any fire, wear self-contained bree protective gear. | ons for firefighters athing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full |
| | 6. ACCIDENTAL RELEASE MEASURES |
| Personal precautions, protective ec | quipment and emergency procedures |
| Personal precautions | Ensure adequate ventilation, especially in confined areas. Avoid contact with eyes and skin. Use personal protective equipment as required. |
| Environmental precautions | |
| Environmental precautions | Do not flush into surface water or sanitary sewer system. See Section 12 for additional ecological Information. |
| Methods and material for containm | ent and cleaning up |
| Methods for containment | Prevent further leakage or spillage if safe to do so. |
| Methods for cleaning up | 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. Use personal protective equipment as required.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Incompatible materials Strong oxidizing agents, Acids

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Control parameters

Exposure Guidelines

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---------------|--|--|---|
| COPPER | TWA: 1 mg/m ³ Cu dust and mist | TWA: 0.1 mg/m ³ fume | IDLH: 100 mg/m ³ Cu dust and mist |
| 7440-50-8 | | TWA: 1 mg/m ³ dust and mist | TWA: 1 mg/m ³ Cu dust and mist |
| | | (vacated) TWA: 0.1 mg/m ³ Cu dust, | |
| | | fume, mist | |
| CALCIUM OXIDE | TWA: 2 mg/m ³ | TWA: 5 mg/m ³ | IDLH: 25 mg/m ³ |
| 1305-78-8 | | (vacated) TWA: 5 mg/m ³ not in | TWA: 2 mg/m ³ |
| | | effect as a result of reconsideration | |
| GRAPHITE | TWA: 2 mg/m ³ respirable fraction | TWA: 15 mg/m ³ total dust synthetic | IDLH: 1250 mg/m ³ |
| 7782-42-5 | all forms except graphite fibers | TWA: 5 mg/m ³ respirable fraction | TWA: 2.5 mg/m ³ natural respirable |
| | | synthetic | dust |
| | | (vacated) TWA: 2.5 mg/m ³ | |
| | | respirable dust natural | |
| | | (vacated) TWA: 10 mg/m ³ total dust | |
| | | synthetic | |
| | | (vacated) TWA: 5 mg/m ³ respirable | |
| | | fraction synthetic | |
| | | TWA: 15 mppcf natural | |

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

Information on basic physical and chemical properties

| Physical state | Paste |
|-----------------|--------------------------|
| Appearance | Copper |
| Odor | (Petroleum distillates) |
| Odor threshold | No information available |
| <u>Property</u> | Values_ |
| pH | No information available |

Remarks • Method

| Melting point / freezing point Boiling point / boiling range Flash point Evaporation rate Flammability (solid, gas) Flammability Limit in Air | No information available > 300 °C / >572 °F 107 °C / 225 °F < 1 No information available | Butyl acetate = 1 |
|--|---|-------------------|
| Upper flammability limit: | No information available | |
| Lower flammability limit: | No information available | |
| Vapor pressure | No information available | |
| Vapor density | >1 | Air = 1 |
| Relative density | 1.31 | |
| 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 Molecular weight VOC Content (%) Density Bulk density | No information available No information available 0 No information available 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

Excessive heat.

Incompatible materials

Strong oxidizing agents, Acids

Hazardous Decomposition Products

Carbon oxides Oxides of sulfur

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

| Inhalation | May cause irritation of respiratory tract. |
|--------------|--|
| 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 | Harmful if swallowed. |

31163 - COPPER ANTI-SEIZE LUBRICANT 16 OZ.

| Chemical Name | Oral LD5 | | rmal LD50 | Inhalation LC50 | | |
|--|--|---|------------------------|-------------------------------|--|--|
| CALCIUM OXIDE | = 500 mg/kg | (Rat) | - | - | | |
| 1305-78-8 | | | | | | |
| MINERAL OIL | > 5000 mg/kg | (Rat) | - | - | | |
| 8042-47-5 | | | | | | |
| Information on toxicolog | ical effects | | | | | |
| Symptoms | No informatio | n available. | | | | |
| Delayed and immediate e | Delayed and immediate effects as well as chronic effects from short and long-term exposure | | | | | |
| Sensitization | No informatio | n available. | | | | |
| Germ cell mutagenicity | No informatio | n available. | | | | |
| Carcinogenicity | The table bel | ow indicates whether each | n agency has listed ar | y ingredient as a carcinogen. | | |
| Chemical Name | ACGIH | IARC | NTP | OSHA | | |
| DISTILLATES | A2 | Group 1 | - | Х | | |
| (PETROLEUM), | | · | | | | |
| HYDROTREATED HEAVY | | | | | | |
| NAPHTHENIC | | | | | | |
| 64742-52-5 | | | | | | |
| ACGIH (American Conf | erence of Governmental Ind | ustrial Hygienists) | | | | |
| A2 - Suspected Human C | | 50 . | | | | |
| IARC (International Agency for Research on Cancer) | | | | | | |
| Group 1 - Carcinogenic to Humans | | | | | | |
| OSHA (Occupational Safety and Health Administration of the US Department of Labor) | | | | | | |
| X - Present | 2 | | · | | | |
| | May cause adverse liver effects. | | | | | |
| Chronic toxicity | May cause ad | dverse liver effects. | | | | |
| Chronic toxicity Target Organ Effects | - | dverse liver effects. ular System (CVS), Eyes, | kidnev, Liver, Respira | torv svstem. Skin. | | |

The following values are calculated based on chapter 3.1 of the GHS document . ATEmix (oral) 1861 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

12.2675 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

| Chemical Name | Algae/aquatic plants | Fish | Crustacea |
|--|---|--|--|
| DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTHENIC 64742-52-5 | - | 5000: 96 h Oncorhynchus mykiss mg/L LC50 | 1000: 48 h Daphnia magna 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 |
| CALCIUM OXIDE 1305-78-8 | - | 1070: 96 h Cyprinus carpio mg/L LC50 static | - |
| MINERAL OIL 8042-47-5 | - | 10000: 96 h Lepomis macrochirus mg/L LC50 | - |

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility

No information available.

| Chemical Name | Partition coefficient |
|---------------|-----------------------|
| MINERAL OIL | >6 |
| 8042-47-5 | |

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 | Not applicable |

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 |
|---------------|-----------------------------------|
| COPPER | Toxic |
| 7440-50-8 | |
| CALCIUM OXIDE | Corrosive |
| 1305-78-8 | |

14. TRANSPORT INFORMATION

| DOT Proper shipping name: | Not regulated |
|-------------------------------|---------------|
| IATA Proper shipping name: | Not regulated |
| IMDG Proper shipping name: | Not regulated |

15. REGULATORY INFORMATION

| International Inventories | |
|---------------------------|----------|
| TSCA | Complies |
| DSL/NDSL | Complies |
| EINECS/ELINCS | Complies |
| ENCS | Complies |
| IECSC | Complies |
| KECL | Complies |
| PICCS | Complies |
| AICS | 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 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 % |
|-----------------------------------|-------------------------------|
| COPPER - 7440-50-8 | 1.0 |
| SARA 311/312 Hazard Categories | |
| Acute health hazard | Yes |
| Chronic Health Hazard | No |
| Fire hazard | No |
| 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 |
|---------------------|--------------------------------|------------------------|---------------------------|-------------------------------|
| COPPER 7440-50-8 | - | Х | Х | - |

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)

| COPPER 5000 lb - RQ 5000 lb final RQ 7440-50-8 RQ 2270 kg final RQ | Chemical Name | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ) |
|---|---------------|--------------------------|----------------|--------------------------|
| 7440-50-8 RO 2270 kg final RO | COPPER | 5000 lb | - | RQ 5000 lb final RQ |
| | 7440-50-8 | | | RQ 2270 kg final RQ |

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|----------------------------|------------|---------------|--------------|
| COPPER 7440-50-8 | Х | X | Х |
| CALCIUM OXIDE 1305-78-8 | x | x | x |
| GRAPHITE 7782-42-5 | X | X | Х |

U.S. EPA Label Information EPA Pesticide Registration Number Not applicable

WHMIS Hazard Class

D2B - Toxic materials

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

| NFPA | Health hazards | 1 | F |
|------|----------------|---|---|
| HMIS | Health hazards | 1 | F |

Flammability 1 Flammability 1 Instability 0 Physical hazards 0

Personal protection B

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

27-Jan-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