SAFETY DATA SHEET

1. Identification

Product identifier LPS® Copper Anti-Seize

Other means of identification

Part Number 02908, 02910, C02908, C02910

Recommended use A low-friction anti-seize lubricant designed to prevent seizure and galling and resist settling and

hardening of welding.

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

ITW Pro Brands Company name **Address** 4647 Hugh Howell Rd. Tucker, GA 30084

Country (U.S.A.)

Tel: +1 770-243-8800

1-800-424-9300 In Case of Emergency

1-703-527-3887

Website www.lpslabs.com

E-mail lpssds@itwprobrands.com **Supplier** ITW Permatex Canada 1-35 Brownridge Road

Halton Hills, ON, L7G 0C6

Canada

1-800-241-8334

2. Hazard(s) identification

Physical hazards Not classified. Not classified. **Health hazards Environmental hazards** Not classified.

Label elements

Hazard symbol None. None. Signal word

Hazard statement The mixture does not meet the criteria for classification.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Wash hands after handling. Response

Store away from incompatible materials. Storage

Dispose of waste and residues in accordance with local authority requirements. **Disposal**

Other hazards None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name Common name and synonyms CAS number COPPER, ELEMENTAL 7440-50-8

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Material name: LPS® Copper Anti-Seize SDS CANADA 02908, 02910, C02908, C02910 Version #: 01 Issue date: 07-19-2016

Skin contact Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact Rinse with water. Get medical attention if irritation develops and persists.

Rinse mouth. Get medical attention if symptoms occur. Ingestion Direct contact with eyes may cause temporary irritation. Most important

symptoms/effects, acute and

delaved

Treat symptomatically.

Indication of immediate medical attention and special

treatment needed

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media Unsuitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting

Use water spray to cool unopened containers.

equipment/instructions Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Prevent entry into waterways, sewer, basements or confined areas. Following product recovery,

flush area with water. For waste disposal, see section 13 of the SDS.

Environmental precautions Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling Avoid prolonged exposure. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Store in original tightly closed container. Store away from incompatible materials (see Section 10

of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Туре	Value	Form
COPPER, ELEMENTAL (CAS 7440-50-8)	TWA	1 mg/m3	Dust and mist.
		0.2 mg/m3	Fume.
Canada. Alberta OELs (Occupati	ional Health & Safety Code, Scl	nedule 1, Table 2)	
Components	Туре	Value	Form
COPPER, ELEMENTAL (CAS 7440-50-8)	TWA	1 mg/m3	Dust and mist.
		0.2 mg/m3	Fume.
Canada. British Columbia OELs. Safety Regulation 296/97, as amo	• •	s for Chemical Substances, C	Occupational Health and
Components	Туре	Value	Form
COPPER, ELEMENTAL (CAS 7440-50-8)	TWA	1 mg/m3	Dust and mist.
		0.2 mg/m3	Fume.

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) **Form** Components Value Type COPPER, ELEMENTAL TWA 1 mg/m3 Dust and mist. (CAS 7440-50-8) 0.2 mg/m3 Fume. Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) Components Value **Form** Type COPPER, ELEMENTAL TWA 0.2 mg/m3 Fume. (CAS 7440-50-8) Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) Value Components Type **Form** COPPER. ELEMENTAL **TWA** 1 mg/m3 Dust and mist. (CAS 7440-50-8)

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

0.2 mg/m3

Fume.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove

supplier.

Other Wear suitable protective clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygieneAlways observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective

equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state Solid.
Form Paste.

Color Copper, Bronze.

Odor Slight petroleum odor

Odor threshold Not available. pH Not available.

Melting point/freezing point > 449.6 °F (> 232 °C) Initial boiling point and boiling > 500 °F (> 260 °C)

range

Flash point > 429.8 °F (> 221.0 °C) Open Cup

Evaporation rate Not available.
Flammability (solid, gas) Not applicable.
Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

(%)

Flammability limit - upper

(%)

Vapor density

Not available.

Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure Not available.

Relative density 1.09

Solubility(ies)

Solubility (water) Insoluble in water

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperatureNot available.Decomposition temperatureNot available.ViscosityNot available.

Other information

Explosive properties Not explosive. **Oxidizing properties** Not oxidizing.

VOC None

10. Stability and reactivity

ReactivityThe product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stabilityMaterial is stable under normal conditions. **Possibility of hazardous**Hazardous polymerization does not occur.

reactions

Conditions to avoid Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

Carbon oxides.

11. Toxicological information

Information on likely routes of exposure

Inhalation Prolonged inhalation may be harmful.

Skin contact

No adverse effects due to skin contact are expected.

Eye contact

Direct contact with eyes may cause temporary irritation.

Ingestion Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics

Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity

Components Species Test Results

COPPER, ELEMENTAL (CAS 7440-50-8)

Acute Dermal

LD50 Rat > 2000 mg/kg, 24 Hours

Inhalation

LC50 Rat > 5.11 mg/l, 4 Hours

Oral

LD50 Rat 481 mg/kg

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation. **Serious eve damage/eve** Direct contact with eyes may cause temporary irritation.

irritation

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicityNo data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

Reproductive toxicityThis product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

Not likely, due to the form of the product. **Aspiration hazard** Prolonged inhalation may be harmful. Chronic effects

Further information None known.

12. Ecological information

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

Test Results Components **Species**

COPPER, ELEMENTAL (CAS 7440-50-8)

Aquatic

EC50 Crustacea Water flea (Daphnia magna) 0.036 mg/l, 48 hours

Fish LC50 Fathead minnow (Pimephales promelas) 0.0319 - 0.0544 mg/l, 96 hours

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available. Mobility in soil No data available. Other adverse effects None known.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Since emptied containers may retain product residue, follow label warnings even after container is Contaminated packaging

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. Transport information

TDG

UN3077 **UN number**

UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (COPPER, ELEMENTAL),

MARINE POLLUTANT

Transport hazard class(es)

9 Class Subsidiary risk Ш Packing group **Environmental hazards** Yes

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IATA

UN number UN3077

UN proper shipping name Environmentally hazardous substance, solid, n.o.s. (COPPER, ELEMENTAL)

Transport hazard class(es)

Class 9 Subsidiary risk Ш Packing group **Environmental hazards** Yes **ERG Code** 9L

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo

aircraft

Allowed with restrictions.

Allowed with restrictions. Cargo aircraft only

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IMDG

UN3077 **UN number**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (COPPER, ELEMENTAL), UN proper shipping name MARINE POLLUTANT

Transport hazard class(es)

9 Class Subsidiary risk Packing group Ш

Environmental hazards

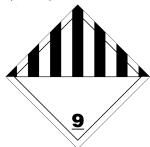
Marine pollutant Yes F-A, S-F **EmS**

Transport in bulk according to Annex II of MARPOL 73/78 and

Special precautions for user Read safety instructions, SDS and emergency procedures before handling. Not applicable.

the IBC Code

IATA; IMDG; TDG



Marine pollutant



General information IMDG Regulated Marine Pollutant.

15. Regulatory information

Canadian regulations

Controlled Drugs and Substances Act

Not regulated.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Ontario. Toxic Substances. Toxic Reduction Act, 2009. Regulation 455/09 (July 1, 2011)

COPPER, ELEMENTAL (CAS 7440-50-8)

Precursor Control Regulations

Not regulated.

International regulations

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto protocol

Not applicable.

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Montreal Protocol

Not applicable.

Basel Convention

Not applicable.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical	Yes

Substances (EINECS)

European List of Notified Chemical Substances (ELINCS) Europe No Japan Inventory of Existing and New Chemical Substances (ENCS) No Existing Chemicals List (ECL) Korea No New Zealand New Zealand Inventory Yes Philippines Philippine Inventory of Chemicals and Chemical Substances Yes

(PICCS)

Toxic Substances Control Act (TSCA) Inventory United States & Puerto Rico

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information

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Version # 01

ITW Pro Brands cannot anticipate all conditions under which this information and its product, or Disclaimer

the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. 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.

Revision information Product and Company Identification: Product and Company Identification

> Composition / Information on Ingredients: Ingredients Physical & Chemical Properties: Multiple Properties Transport Information: Material Transportation Information

Regulatory Information: Risk Phrases - Labeling

HazReg Data: North America

GHS: Classification

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Yes