



PPS INDUSTRIES LIMITED

Material Safety Data Sheet

☐ 1 Identification of substance:

- **Product name:** PRO-OX C50
- **Recommend use:** Immersion oxidising material for copper and brass
- **Stock number:** 178845, 178863
- **Manufacturer/Supplier:**
PPS Industries Limited
86 Hugo Johnston Drive,
Penrose,
Auckland, New Zealand
P.O.Box 12-823, Penrose, Auckland 1642
Phone: 64 9 579-1001
Facsimile: 64 9 579-9474
Emergency Phone: 0800 657 894 Monday to Friday 8am-4pm
Web Site: www.ppsindustries.co.nz
- **Emergency contact detail:**
For emergency only. During normal hours call PPS Industries office.

Organization	Location	Phone
National POSITION CENTER	New Zealand	0800 647-766
Chemcall 24/7 Emergency Response Service	New Zealand	0800 243-6225

☐ 2 Hazards identification

Classified as hazardous according to the criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001.
Classified as a Dangerous Goods according to NZS 5433.

Hazard description: Class 6.1 - 8, Toxic liquid, Corrosive
Inorganic N.O.S., PG II, UN3289

HSNO Class:

Class 6 Toxicity

6.1B(dermal) Acutely Toxic.
6.1D(oral) Acutely Toxic.
6.6B Suspected human mutagens.
6.9B(oral) Harmful to human target organs or systems

Class 8 Corrosive

8.2C Corrosive to dermal tissue.
8.3A Corrosive to ocular tissue.

Class 9 Ecotoxicity

9.1C Substance that are harmful in the aquatic environment.
9.3C Substance that are harmful to the terrestrial vertebrates.

EPA Group Standard HSR002510 - Additive, process chemicals and raw materials (Toxic[6.1], Corrosive) group standard 2020

GHS Classification:



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Hazard Pictogram:



Signal word: Danger

Hazard class:

Dermal Acute Toxicity: Dermal Category 2

Acute Toxicity: Oral Category 4

Germ cell Mutagenicity Category 2

Specific Target organ toxicity Single exposure Category 2

Skin Corrosion/irritation Category 1C

Serious eye damage/eye irritation Category 1

Hazardous to the Aquatic environment Acute hazard Category 3

Ecotoxic to Terrestrial Vertebrates

Hazard statement(s):

H302 Harmful if swallowed

H310 Fatal in contact with skin

H341 Suspected of causing genetic defects

H371 May cause damage to organs

H314 Causes skin burns and eye damage.

H318 Causes serious eye damage

H402 Harmful to aquatic life

H433 Harmful to Terrestrial Vertebrates

Precautionary Statement(s) Prevention:

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children

P103 Read labels before use.

P264 Wash the hands and other exposed parts of the body, thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P101 If medical advice is needed, have product container or label at hand.

P262 Do not get in eyes, on skin, or on clothing

P264 Wash affected body parts thoroughly after handling

P270 Do not eat, drink or smoke when using this product

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P201 Obtain special instructions before use

P202 Do not handle until all safety precautions have been read and understood.

P281 Use personal protective equipment as required.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash the affected body parts thoroughly after handling



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P270 Do not eat, drink or smoke when using this product
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P264 Wash the affected body parts thoroughly after handling.
P280 wear protective gloves/protective clothing/eye protection/face protection.
P280 Wear protective gloves/protective clothing/eye protection/face protection
P273 Avoid release to the environment
P103 Read label before use
P273 Avoid release to the environment

Precautionary Statement(S) Response:

P301+P310 If swallowed: Immediately call poison centre or doctor. Rinse Mouth with water.
P302+P350 If on skin: Gently wash with plenty of soap and water. Immediately Call a poison centre or doctor
P322 For specific measures read the Label.
P361 Take off immediately all the contaminated cloths
P363 wash contaminated clothing before reuse.

P301+P330+P331 If swallowed: Rinse mouth. Do not induce vomiting.
P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water (or shower)

P363+P304+P340 Wash contaminated clothing before reuse. If inhaled: Remove victim to fresh Air and keep at rest in a position comfortable for breathing.
P310 Immediately call a poison centre or a doctor.
P321 For specific treatment read the Label.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove Contact Lenses if present and easy to do. Continue rinsing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact Lenses if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor/physician.
P308+P313 If exposed or concerned: Get medical advice/attention.
P309+P311 If exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.

Precautionary Statement(S) Storage:

P405 Store Locked up

Precautionary Statement(S) Disposal:

P501 Dispose of contents/container to an appropriate treatment and Disposal Facility in accordance with applicable laws and regulations.

☐ 3 Composition/Data on components

Chemical characterization:

Description	(CAS#)	Concentration	Hazardous
selenium dioxide	7446-08-4	2 - 5% w/v	Yes
Hydrochloric acid	7667-38-2	4 - 8% w/v	Yes
Water	7758-99-8	balance	No



☐ **4 First aid measures**

After inhalation

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

After skin contact

Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse. Thoroughly clean shoes before reuse.

After eye contact

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

After Ingestion

If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. Get medical attention immediately.

☐ **5 Fire fighting measures**

Fire:

Not combustible.

Explosion:

Can react with chemically reactive metals such as aluminium, zinc, magnesium, copper, etc. to release hydrogen gas that can form explosive mixtures with air.

Contact with oxidisable substances may cause extremely violent combustion.

Fire Extinguishing Media:

Flood with large amounts of water. Water spray may be used to keep fire-exposed containers cool. Do not allow water runoff to enter sewers or waterways.

Special Information:

Solution process causes formation of corrosive mists. Hot or molten material can react violently with water. In the event of a fire, wear full protective clothing and approved self-contained breathing apparatus with full facemask operated in the pressure demand or other positive pressure mode.

☐ **6 Accidental release measures**

Person-related safety precautions:

Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation

Measures for environmental protection:

Do not allow material to be released to the environment without proper governmental permits.

Measures for cleaning/collecting:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Sweep up and containerise for reclamation or disposal.
Ensure adequate ventilation.



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Keep away from ignition sources.

Additional information:

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

☐ **7 Handling and storage**

Handling

Information for safe handling:

Wear special protective equipment (Sec. 8) for maintenance break-in or where exposures may exceed established exposure levels.

Wash hands, face, forearms and neck when exiting restricted areas. Shower, dispose of outer clothing, change to clean garments at the end of the day.

Wash hands before eating and do not eat, drink, or smoke in workplace.

Storage

Information about storage in one common storage facility:

Protect against physical damage.

Do not store together with oxidizing materials.

Avoid storage on wood floors.

Remove and dispose of any spilled chemical; do not return to original containers.

Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed containers.

☐ **8 Exposure controls and personal protection**

Personal protective equipment

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures below the airborne exposure limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.

General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Remove all soiled and contaminated clothing immediately.

Wash hands before breaks and at the end of work.

Breathing equipment:

Use suitable respirator when high concentrations are present.

Eye protection:

Use chemical safety goggles and/or full-face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

Skin protection:

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

☐ **9 Physical and chemical properties**

General Information



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Form: Liquid
Colour: Colourless
Odour: Acidic

Change in condition

Melting point/Melting range: Not determined
Boiling point/Boiling range: Not determined
Sublimation temperature / start: Not determined
Flash point: Not determined
Flammability (solid, gaseous) Not flammable.
Ignition temperature: Not determined
Decomposition temperature: Not determined
Danger of explosion: Product is not explosive.
Density: at 20 ° C 2.2 g/cm³
PH: 1.3
Solubility in / Miscibility with Water: 100%

☐ 10 Stability and reactivity

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Water, moisture, incompatible materials

Incompatibility with various substances:

Reactive with oxidizing agents.
Slightly reactive to reactive with moisture.

Corrosivity: Not available.

Polymerization: Will not occur.

☐ 11 Toxicological information

Routes of Entry: Absorbed through skin. Eye contact. Inhalation. Ingestion.

Toxicity to Animals:

LD50: Not available.

LC50: Not available.

Chronic Effects on Humans: May cause damage to the following organs: the nervous system, liver, central nervous system(CNS).

Other Toxic Effects on Humans:

Very hazardous in case of skin contact (irritant), of ingestion.
Hazardous in case of inhalation (lung corrosive).
Slightly hazardous in case of skin contact (corrosive), of eye contact (corrosive).

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans:

Acute and Chronic Potential Health Effects:

Skin: Causes skin irritation and/or burns depending on the severity of exposure

Eyes: Causes eye irritation and/or burns depending on the severity of the exposure. Eye contact may result in permanent damage and complete vision loss.

Inhalation: May cause respiratory tract irritation with coughing wheezing, laryngitis. May also cause shortness of breath, headache, nausea, vomiting, inflammation, bronchitis, pulmonary edema, and chemical pneumonitis.

Ingestion: Swallowing large amounts may be harmful or fatal. Over-ingestion of Selenium or selenium compounds may cause gastrointestinal/digestive tract distress with nausea, vomiting, diarrhea, vasopharyngeal irritation, garlic like odour of the breath and



sweat, metallic taste, damage to mouth, throat, and esophagus. While selenium in the diet is essential for proper nutrition, long-term ingestion of high amounts may cause gastrointestinal/digestive tract and nervous system disturbances (giddiness, lassitude, irritability, drowsiness, excessive fatigue), breathing difficulty (dyspnea), skin sores, and yellowish skin, pallor, loss of hair and nails, and decayed or spotted teeth. In some individuals, nervous system effects may progress to numbness, convulsions, and paralysis. Overexposure may also cause anemia, weight loss, lumbar pain, kidney damage, and liver damage. Acute selenium poisoning is potentially lethal due to cardiac failure and/or pulmonary edema.

☐ 12 Ecological information

General notes:

Environmental Fate:

When released into the soil, this material may leach into groundwater. When released into water, this material is not expected to evaporate or biodegrade significantly. This material may bioaccumulate to some extent. When released into the air, this material may be removed from the atmosphere to a moderate extent by wet deposition.

☐ 13 Disposal considerations

Product:

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a local council approved waste facility. Processing, use or contamination of this product may change the waste management options.

Uncleaned packagings:

Dispose of container and unused contents in accordance with local council requirements.

☐ 14 Transport information

Hazard class: 6.1 - 8

Identification number: UN3289

Packing group: II

Hazchem: 2X

Proper shipping name (technical name): TOXIC LIQUID CORRSIVE INORGANIC,
N.O.S.

☐ 15 Regulations

HSNO Class:

Class 6 Toxicity

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standard 2020

Certified Handler : Applicable, HSNO Class 6.1B

Tracking : Applicable, HSNO class 6.1B

☐ **16 Other information:**

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

- **Issue date:** 13/09/2021
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