

Safety Data Sheet

in accordance with EPA and WORKSAFE regulations

Printing date 14.02.2022

Revision: 14.02.2022

1 Identification of the substance or mixture and of the supplier

Product Name: Solder Wire

Other Means of Identification: Metal Alloy

Part Number:

Solder wire: NS3008, NS3013

Solder wire: NS3005, NS3010, NS3001, NS3014, NS3002, NS301

Recommended Use of the Chemical and Restriction on Use: Soldering

Emergency telephone number: National Poison Centre: 0800 POISON (0800 764-766)

2 Hazards identification

Hazardous Nature:

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Health and Safety at Work (Hazardous Substances) Regulations 2017, New Zealand.

Not classified as Dangerous Goods for transport according to the New Zealand Standard NZS 5433:2020 Transport of Dangerous Goods on Land.



Skull and crossbones

Acute Toxicity (Oral) 3 H301 Toxic if swallowed.



Health hazard

Germ Cell Mutagenicity 2 H341 Suspected of causing genetic defects.

Carcinogenicity 2 H351 Suspected of causing cancer.

Toxic To Reproduction 2 H361 Suspected of damaging fertility or the unborn child.

STOT RE 1 H372 Causes damage to organs through prolonged or repeated exposure.



Environment

Aquatic Acute 1 H400 Very toxic to aquatic life.

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.



Eye Irrit. 2A H319 Causes serious eye irritation.

Signal Word Danger

Hazard Statements

H301 Toxic if swallowed.

H319 Causes serious eye irritation.

H341 Suspected of causing genetic defects.

H351 Suspected of causing cancer.

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H361 Suspected of damaging fertility or the unborn child.
 H372 Causes damage to organs through prolonged or repeated exposure.
 H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements

P201 Obtain special instructions before use.
 P202 Do not handle until all safety precautions have been read and understood.
 P260 Do not breathe dust/fume/gas/mist/vapours/spray.
 P264 Wash thoroughly after handling.
 P270 Do not eat, drink or smoke when using this product.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
 P321 Specific treatment (see on this label).
 P330 Rinse mouth.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P308+P313 IF exposed or concerned: Get medical advice/attention.
 P314 Get medical advice/attention if you feel unwell.
 P337+P313 If eye irritation persists: Get medical advice/attention.
 P391 Collect spillage.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with local/regional/national regulations.

3 Composition/Information on ingredients

Chemical Characterization: Mixtures**Description:** Mixture of substances listed below with nonhazardous additions.**Hazardous Components:**

CAS: 7440-31-5	Tin  Aquatic Acute 1, H400; Aquatic Chronic 1, H410;  Acute Toxicity (Oral) 4, H302; Eye Irrit. 2A, H319	50-60%
CAS: 7439-92-1	Lead  Acute Toxicity (Oral) 3, H301;  Germ Cell Mutagenicity 2, H341; Carcinogenicity 2, H351; Toxic To Reproduction 2, H361; STOT RE 1, H372;  Aquatic Acute 1, H400; Aquatic Chronic 1, H410	35-45%
CAS: 7440-36-0	Antimony  Carcinogenicity 2, H351; Toxic To Reproduction 2, H361; STOT RE 2, H373;  Aquatic Chronic 2, H411;  Eye Irrit. 2A, H319	≥0.25-≤1%

4 First aid measures

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if breathing problems develop.

Skin Contact:

In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap. Seek medical attention if symptoms occur.

Eye Contact:

In case of eye contact, flush cautiously with water for 15 minutes. Retract eyelids during this process. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention if symptoms persist.

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Ingestion:

If swallowed, do not induce vomiting. Immediately rinse mouth with water. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

Symptoms Caused by Exposure:

Inhalation: May cause respiratory irritation.

Skin Contact: May cause skin irritation. May cause burns in molten form.

Eye Contact: Causes serious eye irritation.

Ingestion: Toxic if swallowed. May cause gastrointestinal irritation, nausea, diarrhoea and vomiting.

5 Fire fighting measures

Suitable Extinguishing Media: Water fog, foam, dry powder or carbon dioxide.

Specific Hazards Arising from the Chemical:

Hazardous combustion products include lead fumes.

Product is non-flammable.

Containers close to fire should be removed only if safe to do so. Use water spray to cool fire exposed containers.

Prevent run-off from fire fighting entering drains or water courses.

Special Protective Equipment and Precautions for Fire Fighters:

When fighting a major fire wear self-contained breathing apparatus and protective equipment.

6 Accidental release measures

Personal Precautions, Protective Equipment and Emergency Procedures:

Wear approved respiratory protection, chemical resistant gloves, protective clothing and safety boots. Evacuate all non-essential personnel from affected area. Do not breathe smoke or dust. Ensure adequate ventilation.

Environmental Precautions:

In the event of a major spill, prevent spillage from entering drains or water courses.

Methods and Materials for Containment and Cleaning Up:

Collect the spilled material with a vacuum or by a wet sweeping technique and place into a suitable container for disposal.

7 Handling and storage

Precautions for Safe Handling:

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of dust.

Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

Conditions for Safe Storage:

Store in a cool, dry and well ventilated area. Avoid high temperatures. Keep away from strong oxidising agents and strong acids.

8 Exposure controls/personal protection

Exposure Standards:

CAS: 7440-31-5 Tin

WES TWA: 2 mg/m³

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CAS: 7439-92-1 Lead	
WES	TWA: 0.05 mg/m ³ suspected carcinogen, bio; inorg. dusts + fumes, as Pb
CAS: 7440-36-0 Antimony	
WES	TWA: 0.5 mg/m ³ as Sb

Engineering Controls:

Provide exhaust ventilation or other engineering controls when soldering to keep the airborne concentrations of smoke/fumes below occupational exposure standards.

Respiratory Protection:

Use an approved vapour respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapour, inadequate ventilation, development of respiratory tract irritation) and engineering controls are not feasible. See Australian Standards AS/NZS 1715 and 1716 for more information.

Skin Protection:

Heat resistant gloves are recommended when soldering. See Australian/New Zealand Standard AS/NZS 2161 for more information.

When selecting gloves for use against certain chemicals, the degradation resistance, permeation rate and permeation breakthrough time should be considered.

Occupational protective clothing (depending on conditions in which it has to be used, in particular as regards the period for which it is worn, which shall be determined on the basis of the seriousness of the risk, the frequency of exposure to the risk, the characteristics of the workstation of each worker and the performance of the protective clothing). See Australian/New Zealand Standard AS/NZS 4501 for more information.

Eye and Face Protection:

Eye and face protectors for protection against molten metal are recommended when soldering. See Australian/New Zealand Standard AS/NZS 1337 for more information.

9 Physical and chemical properties

Appearance:

Form:	Solid
Colour:	Silver grey
Odour:	None
Odour Threshold:	No information available
pH-Value:	No information available
Melting point/freezing point:	190 °C
Initial Boiling Point/Boiling Range:	No information available
Flash Point:	No information available
Flammability:	Not flammable
Auto-ignition Temperature:	No information available
Decomposition Temperature:	560 °C
Explosion Limits:	
Lower:	No information available
Upper:	No information available.
Vapour Pressure:	Not applicable.
Density:	8.5 g/cm ³
Vapour Density:	No information available
Evaporation Rate:	No information available
Solubility in Water:	Not soluble in water.
Partition Coefficient (n-octanol/water):	No information available

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Viscosity:

No information available

10 Stability and reactivity

Possibility of Hazardous Reactions: No dangerous reactions known under conditions of normal use.

Chemical Stability: Stable at ambient temperature and under normal conditions of storage and use.

Conditions to Avoid: High temperatures.

Incompatible Materials: Strong oxidising agents and strong acids.

Hazardous Decomposition Products: Lead fumes.

11 Toxicological information

Toxicity:

LD50/LC50 Values:

CAS: 7440-31-5 Tin

Oral	LD50	>2,000 mg/kg (rat)
	LD50	>2,000 mg/kg (rat)
Inhalation	LC50/4 h	>4.75 mg/l (rat)

CAS: 7440-36-0 Antimony

Oral	LD50	7,000 mg/kg (rat)
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Acute Health Effects

Inhalation: May cause respiratory irritation.

Skin: May cause skin irritation. May cause burns in molten form.

Eye: Causes serious eye irritation.

Ingestion: Toxic if swallowed. May cause gastrointestinal irritation.

Skin Corrosion / Irritation: Based on classification principles, the classification criteria are not met.

Serious Eye Damage / Irritation: Causes serious eye irritation.

Respiratory or Skin Sensitisation: Based on classification principles, the classification criteria are not met.

Germ Cell Mutagenicity: Suspected of causing genetic defects.

Carcinogenicity:

Suspected of causing cancer.

Lead is classified by IARC as Group 2B - Possibly carcinogenic to humans.

Reproductive Toxicity: Suspected of damaging fertility or the unborn child.

Specific Target Organ Toxicity (STOT) - Single Exposure:

Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity (STOT) - Repeated Exposure:

Causes damage to organs through prolonged or repeated exposure.

Aspiration Hazard: Based on classification principles, the classification criteria are not met.

Chronic Health Effects:

Signs of chronic lead poisoning include loss of short-term memory or concentration, depression, fatigue, nausea, abdominal pain, loss of coordination, and numbness and tingling in the extremities.

Existing Conditions Aggravated by Exposure: No information available

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12 Ecological information

Ecotoxicity:

Aquatic toxicity:

Very toxic to aquatic life with long lasting effects.

CAS: 7440-31-5 Tin

EC50/72 h >0.00192 mg/l (pseudokirchnerie lla subcapitata)

EC50/3 h >511 mg/l (bacterial)

LC50/96 h >0.00124 mg/l (fathead minnow)

CAS: 7439-92-1 Lead

EC50/48 h 0.6 mg/l (daphnia)

LC50/96 h 0.44 mg/l (carp)

1.17 mg/l (rainbow trout)

LC50/48 h <1 mg/l (invertebrata)

CAS: 7440-36-0 Antimony

LC50/96 h 21.9 mg/l (fathead minnow)

LC50/48 h 18.8 mg/l (daphnia)

Persistence and Degradability: No data available on finished product.

Bioaccumulative Potential: No data available on finished product.

Mobility in Soil: No data available on finished product.

Other adverse effects: No further relevant information available.

13 Disposal considerations

Disposal Methods and Containers: Dispose according to applicable local and state government regulations.

Special Precautions for Landfill or Incineration:

Please consult your state Land Waste Management Authority for more information.

14 Transport information

UN Number Not regulated

Proper Shipping Name Not regulated

Dangerous Goods Class Not regulated

Packing Group: Not regulated

15 Regulatory information

HSNO Approval Code / Group Standard:

N.O.S. (Subsidiary Hazard) Group Standard 2020

HSNO Approval Number: HSR002624

New Zealand Inventory of Chemicals

All ingredients are listed.

16 Other information

Date of Preparation or Last Revision: 14.02.2022

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Abbreviations and acronyms:

GHS: Globally Harmonised System of Classification and Labelling of Chemicals
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
IARC: International Agency for Research on Cancer
STEL: Short Term Exposure Limit
TWA: Time Weighted Average
WES: Workplace Exposure Standard
Acute Toxicity (Oral) 3: Acute toxicity – Category 3
Acute Toxicity (Oral) 4: Acute toxicity – Category 4
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
Germ Cell Mutagenicity 2: Germ cell mutagenicity – Category 2
Carcinogenicity 2: Carcinogenicity – Category 2
Toxic To Reproduction 2: Reproductive toxicity – Category 2
STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
Aquatic Acute 1: Hazardous to the aquatic environment, short-term (Acute). Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment, long-term (Chronic). Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment, long-term (Chronic). Category 2

Disclaimer

This SDS is prepared in accord with the New Zealand Chemical Industry Council document 'Code of Practice (No. HSNO CoP 8-1 09-06)' and Hazardous Substances (Safety Data Sheets) Notice 2020.

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