Safety Data Sheet

in accordance with EPA and WORKSAFE regulations

Printing date 16.02.2022 Revision: 11.02.2022

1 Identification of the substance or mixture and of the supplier

Product Name: Lead Free Solder Packs

Other Means of Identification: Metal Alloy

Product Code:
87-1602 for ZD-160 Lead-free Solder wire range.
87-1624 or 87-1625 for ZD-162 Lead-free Solder wire range.
Part Number:
ZD-160 Solder wire: NS3086, NS3092
ZD-162 Solder wire: NS3088, NS3094, NS3090, NS3096

Recommended Use of the Chemical and Restriction on Use: Solder Wire

Details of Manufacturer or Importer:
Electus Distribution
16-18 Fisher Crescent
Mt Wellington, Auckland 1060

Phone Number: 0800 235 328

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.

Health hazard

Germ Cell Mutagenicity 1A H340 May cause genetic defects.

Environment

Aquatic Acute 1 H400 Very toxic to aquatic life.
Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.

Acute Toxicity (Oral) 4 H302 Harmful if swallowed.
Eye Irrit. 2A H319 Causes serious eye irritation.
Skin Sensitisation 1 H317 May cause an allergic skin reaction.

Signal Word Danger

Hazard Statements
H302 Harmful if swallowed.
H319 Causes serious eye irritation.

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H317 May cause an allergic skin reaction.
H340 May cause genetic defects.
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.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P330	Rinse mouth.
P302+P352	IF ON SKIN: Wash with plenty of water.
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.
P321	Specific treatment (see on this label).
P362+P364	Take off contaminated clothing and wash it before reuse.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
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	99.3%
CAS: 7440-50-8	Copper Acute Toxicity (Oral) 2, H300; Acute Toxicity (Inhalation) 2, H330; Germ Cell Mutagenicity 1A, H340; STOT RE 1, H372; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Eye Irrit. 2A, H319; Skin Sensitisation 1, H317	0.7%

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.

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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 immediate medical attention.

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 an allergic skin reaction. May cause burns in molten form.
Eye Contact: Causes serious eye irritation.
Ingestion: Harmful 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:
No hazardous decomposition products known.
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 measures from 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 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, strong acids, and hydrogen peroxide.

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8 Exposure controls/personal protection

Exposure Standards:	
CAS: 7440-31-5 Tin	
WES	TWA: 2 mg/m³
CAS: 7440-50-8 Copper	
WES	TWA: 0.01 mg/m³ respirable dust, as Cu; Dermal sensitiser

Engineering Controls:
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapour below occupational exposure standards.

Respiratory Protection:
Use an approved respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of dust or fumes, 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. 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 materials or liquids. 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:	221 °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:	7.4 g/cm³

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Relative Density:	7.3
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
Viscosity:	No information available

10 Stability and reactivity

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

Chemical Stability: Stable under normal conditions.

Conditions to Avoid: Avoid high temperatures.

Incompatible Materials: Strong oxidising agents, strong acids, and hydrogen peroxide.

Hazardous Decomposition Products: No hazardous decomposition products known.

11 Toxicological information

Toxicity:

Acute Health Effects
Inhalation: May cause respiratory irritation.
Skin: May cause an allergic skin reaction. May cause burns in molten form.
Eye: Causes serious eye irritation.
Ingestion: Harmful if swallowed. May cause gastrointestinal irritation, nausea, diarrhoea and vomiting.

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: May cause an allergic skin reaction.

Germ Cell Mutagenicity: May cause genetic defects.

Carcinogenicity: This product does NOT contain any IARC listed chemicals.

Reproductive Toxicity: Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity (STOT) - Single Exposure:
Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity (STOT) - Repeated Exposure:
Based on classification principles, the classification criteria are not met.

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

Chronic Health Effects: No data associated with long term health effects.

Existing Conditions Aggravated by Exposure: No data 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)

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: 11.02.2022

Prepared by: MSDS.COM.AU Pty Ltd www.msds.com.au

Abbreviations and acronyms:
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
CAS: Chemical Abstracts Service (division of the American Chemical Society)
IARC: International Agency for Research on Cancer
STEL: Short Term Exposure Limit

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TWA: Time Weighted Average
WES: Workplace Exposure Standard
Acute Toxicity (Oral) 2: Acute toxicity – Category 2
Acute Toxicity (Oral) 4: Acute toxicity – Category 4
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
Skin Sensitisation 1: Skin sensitisation, Hazard Category 1
Germ Cell Mutagenicity 1A: Germ cell mutagenicity – Category 1A
STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1
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

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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