

Material Safety Data Sheet

1. Identification of the substance/mixture and of the company/undertaking

Product:	Lead-free solder wire
Manufacturer:	Conrad Electronic SE
Address:	Klaus-Conrad-Str. 1, D-92240 Hirschau
Telephone:	+49 (0) 9604 / 40 - 8988
Date of issue:	05.08.2021

2. Hazard Identification

Hazard classification:

Acute toxic substance (inhalation): Category 4

Hazardous to the aquatic environment, (acute toxicity): Category 3

Specific target organ toxicity - repeated exposure: Category 2

Indication content:



GHS07



GHS08

Signal word:

Warning

Hazard statement:

1. Harmful if inhaled
2. Harmful to aquatic life
3. May cause damage to organs through prolonged or repeated exposure

Precautionary Statement:

1. Get Medical advice/attention if you feel unwell.
2. Avoid breathing dust/fume/gas/mist/vapours/spray
3. Avoid skin contact

Other hazard:

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3. Composition, Information or Ingredient

Components-Chemical Name	CAS number	Scope of Density Percentage
Tin (Sn)	7440-31-5	90.0~99.0
Silver(Ag)	7440-22-4	0.0~5.0
Copper (Cu)	7440-50-8	0.0~4.0
Rosin	8050-09-7	1.0~5.0

4. First Aid Measures

First aid methods for different exposure routes:

Inhalation

Move the patient to fresh air. If the patient has stopped breathing, give artificial respiration and send to the emergency department.

Skin contact

Rinse with plenty of water and use soap if possible. If irritation persists, seek medical attention.

Eye contact

Rinse with plenty of water for 15 minutes or until the irritation disappears. If the irritation persists, seek medical attention.

Ingestion

Seek your doctor immediately.

Most important symptoms and harmful effects:

Irritation.

Protection to first-aid personnel:

Should wear protection equipment of level C to give first aid in the safe area.

Notes to physicians:

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5. Fire Fighting Measures

Extinguishing media:

Use alcohol resistant foam, carbon dioxide or dry chemical extinguishing agents.

Fire-fighting instructions:

Not applicable

Specific fire-fighting methods:

Not applicable

Special equipment for the protection of firefighters:

Oxygen cylinder and protective clothing.

6. Accidental Release Measures

Personal precautions:

Persons without wearing protection equipment/clothes are forbidden to enter the soiled area before cleaning.

Environmental precautions:

Ventilate the soiled area.

Methods for cleaning up:

1. Recycle the material or dispose with qualified method in most convenient and safe way.
2. The liquid can be absorbed with the vermiculite, sand, soil or similar material.

7. Handling And Storage

Handling:

During work avoid producing dust.

Storage:

Dry and non-corrosive area with no sunlight.



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8. Exposure Controls and Personal Protection

Engineering Measures:

1. Partial air exhaust device for working place.
2. Whole air exhaust device.

Exposure Guidelines:

Control parameters:

Hazardous ingredients	TWA(mg/m3)	STEL	CEILING	BEIs
Tin	2	-	-	-
Silver	0.01	-	-	-
Copper, fume	0.2	-	-	-

Protective Equipment:

- Respiratory protection: 0~10 mg/m3: Dustproof breathing mask.
- 20 mg/m3:
 1. Dustproof breathing mask.
 2. Air supply type breathing mask.
- 50 mg/m3:
 1. Dustproof and air filter breathing mask.
 2. Continuous air supply type breathing mask.
- 100 mg/m3:
 1. High performance filter and air filter breathing mask.
 2. Continuous air supply type breathing mask.
- Unknown consistency: Continuous air supply type breathing mask.
- Escape:
 1. Contain high performance filter and air filter breathing mask.
 2. Continuous air supply type breathing mask.
- Hand protection: Rubber or plastic glove.
- Eye protection:
 1. Safe goggles which can defend splash.
 2. Face guard in an all-round way.
 3. Don't wear contact lenses.
- Skin and body protection: Apron, long sleeves clothes.
- Hygiene measures: Forbid smoking or eating/drinking in the workplace.



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9. Physical And Chemical Properties

Appearance(physical state, color)	Silver gray solid
Odor	-
Odor threshold	-
Melting point	217-270°C
pH	-
Boiling point	-
Flammability (solid, gas)	-
Flash Point	-
Test Method Open cup or Close cup)	-
Decompose temperature	-
Auto-ignition temperature	-
Explosion Limit	-
Vapor Pressure	-
Vapor Density	-
Density	7.3-7.4 g/cm ³
Solubility	Almost Insoluble
Partition coefficient(n-octanol/water,log Kow)	-
Evaporation rate	-
Specific gravity (25°C)	-
Acid value (mgKOH / g)	-
Solid content (%)	-

10. Stability And Reactivity

Stability:

Stable

Possible hazardous reactions under specific conditions:

Not applicable

Conditions to avoid:

Avoid generating dust

Materials to be avoided:

Strong acids, strong oxidizers.

Dangerous products of decomposition:

Not applicable



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11. Toxicological Information

Routes of exposure:

Nose, skin.

Symptoms:

May cause the irritation of nose, skin.

Acute toxicity:

May cause the irritation of nose, skin.

Chronic toxicity or long term toxicity:

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12. Ecological Information

Ecotoxicity:

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Persistent and biodegradable:

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Bio-accumulative potential:

-

Mobility in soil:

-

Other adverse effects:

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13. Disposal Considerations

Methods of waste disposal:

Recycle or dispose of in accordance with applicable regulations.



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14. Transport Information

UN No.:

Not applicable

UN Proper shipping name:

Not applicable

Transportation hazard classification:

Not-restricted by IATA and IMDG.

IMO-IMDG /ICAO/ IATA-DGR:

Not regulated as dangerous.

Packing group:

Not applicable

Marine pollutant (Yes/No):

Not applicable

Specific transport measures and precautionary conditions:

Dry and non-corrosive with no sunlight

15. Regulatory Information

Applicable regulations:

Occupational Safety and Health Laws.

Laws/regulations for disposal, storage, cleaning

Hazardous chemicals labelling general rules

16 .Other Information

Remarks

Indication „-“ represents present not correlation data

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