

Material Safety Data Sheet

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

Product:	Lead-free Solder Wire Sn99.3Cu0.7
Manufacturer:	Conrad Electronic SE
Address:	Klaus-Conrad-Str. 1, D-92240 Hirschau
Telephone:	+49 (0) 9604 / 40 - 8988
Date:	15.04.2020

1.1 Product identifier

Lead-free Solder Wire Sn99.3Cu0.7

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified use: For welding of electronic components

2. Hazards Identification

2.1 Classification of the substance or mixture according to regulation (EC) No 1272/2008 [CLP]

This product is not considered hazardous according to EU REGULATION (EC) No 1272/2008.

2.2 Label elements

Hazard pictograms: Not classified as hazardous under EU REGULATION (EC) No 1272/2008.

Signal word: Not applicable

Hazard statements: Not applicable

Precautionary Statements:

Prevention: Not applicable

Response: Not applicable

Storage: Not applicable

Disposal: Not applicable

2.3 Other hazards

This product contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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3. Composition/Information On Ingredients

3.1. Substances

See 'Composition on ingredients' in Section 3.2

3.2. Mixtures

1. CAS No 2. EC No 3. Index No 4. REACH No	Name	%[weight]	Classification according to regulation (EC) No 1272/2008 [CLP]
1. 7440-31-5 2. 231-141-8 3. Not Available 4. Not Available	Tin	98-100%	Not classified
1. 7440-50-8 2. 231-159-6 3. Not Available 4. Not Available	Copper	0.6-0.8%	Not classified
1. - 2. - 3. Not Available 4. Not Available	Active agent	<1%	Not classified

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4. First Aid Measures

4.1. Description of first aid measures

Inhaled:

If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary.

Skin contact:

Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.

Eye contact:

Wash out immediately with fresh running water. Seek medical attention without delay; if pain persists or recurs seek medical attention.

Swallowed:

Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. Firefighting Measures

5.1. Extinguishing media

Suitable extinguishing media:

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray/Foam/Dry chemical/CO₂

Unsuitable extinguishing media:

High volume water jet.

Specific hazards during firefighting:

There is no special hazard when used under normal conditions.

Further information:

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

5.2. Special hazards arising from the substrate or mixture

There is no special hazard when used under normal conditions.

5.3. Advice for firefighters

Special protective equipment for firefighters:

In the event of fire, wear self-contained breathing apparatus.

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6. Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions:

If the material is in its solid state, pick up and reuse. Use personal protective equipment. Handle in accordance with good industrial hygiene and safety practice.

6.2. Environmental precautions

Environmental precautions:

Do not let spillage release into drainage, ground water and surface water.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up:

Use sorbent material to collect leaks and transfer to suitable closed containers for disposal.

6.4. Reference to other sections

Personal Protective Equipment advice is contained in Section 8 of the SDS.

7. Handling And Storage

7.1. Precautions for safe handling

Advice on safe handling:

Keep away from open flame, sparks and other ignition sources. Keep containers tightly closed and upright when not in use in order to prevent leakage. Do not eat, drink or smoke in working place. For personal protection see section 8. Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion:

Normal fire protection measure.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers:

Store in original container protected from direct sunlight. Keep container tightly closed in a dry and well-ventilated place.

Materials to avoid:

Strong acids and strong oxidizers.

Other data:

Hazardous decomposition products formed under fire conditions: Carbon oxides.

7.3. Specific end use(s)

See section 1.2

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8. Exposure Controls/Personal Protection

8.1. Control parameters

Occupational Exposure Limits (OEL)

Source	Ingredient Material name	TWA	STEL	Peak
EU Consolidated List of Indicative Occupational Exposure Limit Values (IOELVs)	tin	2 mg/m ³	Not Available	Not Available
UK Workplace Exposure Limits (WELs)	Copper (Copper fume (as Cu))	0.2 mg/m ³	Not Available	Not Available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

8.2.2. Personal protection

Respiratory protection:

Wear respiratory protection if necessary.

Hand protection:

Wear protective gloves.

Eye protection:

Wear safety glasses or goggles.

Skin and body protection:

Wear impermeable clothing and safety shoes.

Hygiene measures:

When using do not eat or drink.

8.2.3. Environmental exposure controls

See section 12

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9. Physical And Chemical Properties

9.1. Information on basic physical and chemical properties

Physical state:	Filamentous solid
Colour:	No data available
Odour:	No data available
Odour Threshold:	No data available
Flash point:	No data available
Ignition temperature:	No data available
Lower explosion limit:	No data available
Upper explosion limit:	No data available
Flammability (solid, gas):	Non flammable
Oxidizing properties:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Molecular weight:	No data available
pH:	No data available
Melting point/freezing point:	217-227°C
Boiling point:	>227°C
Sublimation point:	No data available
Vapour pressure:	0.01hPa (20°C)
Density:	7.4
Bulk density:	No data available
Water solubility:	Insouble
Partition coefficient: n-octanol/water:	No data available
Solubility in other solvents:	No data available
Viscosity, dynamic:	No data available
Viscosity, kinematic:	No data available
Relative vapour density:	No data available
Surface tension:	No data available

9.2. Other information

Not Available

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10. Stability And Reactivity

10.1 Hazardous reactions:

Will not occur

10.2 Chemical stability:

Product is considered stable.

10.3. Possibility of hazardous reactions:

See section 7.2

10.4. Conditions to avoid:

Keep away from flame, spark and other sources of ignition.

10.5. Incompatible materials:

Strong acids and strong oxidizers should be avoided.

10.6. Hazardous decomposition products:

None known

11. Toxicological Information

11.1. Information on toxicological effects

Acute toxicity

Tin:

Acute toxicity(oral) LD50) (Rat): > 2000 mg/kg (OECD Guideline 423)

Acute toxicity (Dermal) LD50) (Rabbit): > 2000 mg/kg (OECD Guideline 402)

Skin corrosion/irritation

Not classified based on available information.

Serious eye damage/eye irritation

Not classified based on available information.

Skin sensitisation

May cause skin sensitization.

Respiratory sensitisation

Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

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STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

12. Ecological Information

12.1 Ecotoxicity

Tin:

Acute aquatic toxicity: LC50(96h/fish)>12.4ug/l(0ECD Guideline 203)

Chronic aquatic toxicity : EC50(7d/ Crustacea):1303ug/L

Acute aquatic toxicity: LC50(96h/fish): 1.7mg/L; EC50(48h/ Daphnia magna): >100mg/L(0ECD Guideline 202)

Chronic aquatic toxicity: No data available

12.2. Persistence and degradability

Ingredient	Persistence	Water/Soil Persistence: Air
-	-	-

12.3. Bioaccumulative potential

Ingredient	Bioaccumulation
-	-

12.4. Mobility in soil

Ingredient	Mobility
-	-

12.5. Results of PBT and vPvB assessment

Not PBT or vPvB

12.6. Other adverse effects

No data available

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13. Disposal Considerations

13.1. Waste treatment methods

General advice:

Dispose of in accordance with all applicable local, state and federal regulations.

14. Transport Information

Not regulated as Dangerous Goods.

15. Regulatory Information

15.1. Safety, health and environmental regulations / legislation specific for the substance or mixture

Europe EC Inventory Europe ECHA Registered Substances - Classification and Labelling

Europe European Customs Inventory of Chemical Substances

European Chemical Agency (ECHA) Classification & Labelling Inventory

European Union - European Inventory of Existing Commercial Chemical Substances (EINECS)

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs EU

REACH Regulation (EC) No 1907/2006 - Annex IV - Exemptions from the Obligation to Register in

Accordance with Article 2(7)(a)

UK Workplace Exposure Limits (WELs)

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

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16. Other Information

Full text Risk and Hazard code

None

Definitions and abbreviations

PC - TWA: Permissible Concentration-Time Weighted Average PC -

STEL: Permissible Concentration-Short Term Exposure Limit IARC: International Agency for Research on Cancer

ACGIH: American Conference of Governmental Industrial Hygienists

STEL: Short Term Exposure Limit

TEEL: Temporary Emergency Exposure Limit.

IDLH: Immediately Dangerous to Life or Health Concentrations OSF: Odour Safety Factor NOAEL: No Observed Adverse Effect Level

LOAEL: Lowest Observed Adverse Effect Level

Disclaimer:

This SDS is intended to provide a brief summary of our knowledge and guidance regarding the use of this material. The information contained here has been compiled from sources considered by us to be dependable and is accurate to the best of our knowledge. It is not meant to be an all-inclusive document on worldwide hazard communication regulations.

This information is offered in good faith. Each user of this material needs to evaluate the conditions of use and design the appropriate protective mechanisms to prevent employee exposures, property damage or release to the environment. We assumed no responsibility for injury to the recipient or third persons, or for any damage to any property resulting from misuse of the product.