Conforms to 91/155/EEC - 2001/58/EC

SAFETY DATA SHEET

Cookson Electronics ASSEMBLY MATERIALS

Sn99Cu1 3.25mm

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

Product name : **Sn99Cu1 3.25mm**

Code : **20714**

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Manufacturer :
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The Netherlands
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2. Composition/information on ingredients

Substance/Preparation : Preparation

Chemical name*	CAS no.	%	EC Number	Classification
Europe				
tin	7440-31-5	80-100	231-141-8	
copper	7440-50-8	0.5-1	231-159-6	
See Section 16 for the full text of the R Phrases declared above				

*** Occupational Exposure Limit(s), if available, are listed in Section 8**

3. Hazards identification

The preparation is not classified as dangerous according to Directive 1999/45/EC and its amendments.

Skin contact : Irritation of the product in case of skin contact: Not available. Sensitization of the product: Not available.

Aggravating conditions : Repeated or prolonged exposure is not known to aggravate medical condition.

4. First-aid measures

First-Aid measures

Inhalation : If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Obtain medical attention.

Ingestion : Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Obtain medical attention.

Eye Contact : Check for and remove any contact lenses. In case of contact, immediately flush eyes with a copious amount of water for at least 15 minutes. Obtain medical attention.

5. Fire-fighting measures

Extinguishing Media

Suitable : Not applicable.

Special fire-fighting procedures : Fire fighters should wear self-contained positive pressure breathing apparatus (SCBA) and full turnout gear.

6. Accidental release measures

Personal Precautions : Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Environmental precautions and cleanup methods : Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Note: See section 8 for personal protective equipment and section 13 for waste disposal.

7. Handling and storage

Handling : No specific safety phrase has been found which is applicable for this product.

Storage : Keep container tightly closed. Keep container in a cool, well-ventilated area.

Packaging materials

Recommended use : Use original container.

Danish Fire Class : Not applicable.

8. Exposure controls/personal protection

Engineering measures : Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Hygiene measures : Wash hands after handling compounds and before eating, smoking, using lavatory, and at the end of day.

Ingredient Name	Occupational Exposure Limits
Europe	
tin	**ACGIH TLV (United States, 2001). Skin** STEL: 0.2 mg/m^3 15 minute(s). TWA: 0.1 mg/m^3 8 hour(s).
copper	**ACGIH TLV (United States, 2001). Notes: Adopted Values enclosed are those for which changes are proposed. Consult the Notice of Intended Changes for current proposal. See Notice of Intended changes. Adopted Values enclosed are those for which changes are proposed. Consult the Notice of Inten ded Changes for current proposal. See Notice of Intended changes.** TWA: 1 mg/m^3 8 hour(s). TWA: 0.2 mg/m^3 8 hour(s). Form: Fume
Sweden	
copper	**AFS (Sweden, 2000).** NGV: 0.2 mg/m^3 8 hour(s). Form: Dust
Denmark	
copper	**Arbejdstilsynet (Denmark, 2000).** GV: 0.1 mg/m^3 8 hour(s). Form: Fume GV: 1 mg/m^3 8 hour(s).
Norway	
copper	**Arbeidstilsynet (Norway, 2001).** AN: 1 mg/m^3 8 hour(s). Form: Dust AN: 0.1 mg/m^3 8 hour(s). Form: Fume
France	
copper	**INRS (France, 1999). Notes: Not Legal** VLE: 2 mg/m^3 15 minute(s). Form: Dust VME: 1 mg/m^3 8 hour(s). Form: Dust VME: 0.2 mg/m^3 8 hour(s). Form: Fume
Netherlands	
tin	**Nationale MAC-lijst (Netherlands, 2001). Notes: Tentative** TGG 8 uur: 2 mg/m^3 8 hour(s).
copper	**Nationale MAC-lijst (Netherlands, 2001). Notes: Tentative** TGG 8 uur: 1 mg/m^3 8 hour(s). Form: Dust TGG 8 uur: 0.2 mg/m^3 8 hour(s). Form: Fume
Germany	
tin	**MAK-Werte Liste (Germany, 2000). Skin** Spitzenbegrenzung: 0.2 mg/m^3 4 times per shift, 30 minute(s). Form: Inhalable fraction TWA: 0.1 mg/m^3 8 hour(s). Form: Inhalable fraction **TRGS900 MAK (Germany, 2001).** TWA: 2 mg/m^3 8 hour(s).
copper	**MAK-Werte Liste (Germany, 2000).** Spitzenbegrenzung: 2 mg/m^3 4 times per shift, 30 minute(s). Form: Inhalable fraction Spitzenbegrenzung: 0.2 mg/m^3 4 times per shift, 30 minute(s). Form: Respirable fraction TWA: 1 mg/m^3 8 hour(s). Form: Inhalable fraction TWA: 0.1 mg/m^3 8 hour(s). Form: Respirable fraction **TRGS900 MAK (Germany, 2001).**

	Spitzenbegrenzung: 4 mg/m³ Spitzenbegrenzung: 0.4 mg/m³ Form: Fume TWA: 1 mg/m³ 8 hour(s). TWA: 0.1 mg/m³ 8 hour(s). Form: Fume
Finland	
tin	**Työterveyslaitos (Finland, 2001).** TWA: 2 mg/m³ 8 hour(s).
copper	**Työterveyslaitos (Finland, 2001).** STEL: 0.1 ppm 15 minute(s). Form: Dust STEL: 0.1 ppm 15 minute(s). Form: Fume TWA: 1 mg/m³ 8 hour(s).
United Kingdom (UK)	
tin	**EH40-OES (United Kingdom (UK), 2002).** TWA: 2 mg/m³ 8 hour(s). STEL: 4 mg/m³ 15 minute(s).
copper	**EH40-OES (United Kingdom (UK), 2002). Notes: OES** STEL: 2 mg/m³ 15 minute(s). Form: Dusts and Mists TWA: 1 mg/m³ 8 hour(s). Form: Dusts and Mists TWA: 0.2 mg/m³ 8 hour(s). Form: Fume
Austria	
tin	**BMWA_MAK (Austria, 2001).** STEL: 4 mg/m³ 4 times per shift, 15 minute(s). TWA: 2 mg/m³ 8 hour(s).
copper	**BMWA_MAK (Austria, 2001).** STEL: 4 mg/m³ 4 times per shift, 15 minute(s). STEL: 0.4 mg/m³ 4 times per shift, 15 minute(s). Form: Dust and fumes TWA: 1 mg/m³ 8 hour(s). TWA: 0.1 mg/m³ 8 hour(s). Form: Dust and fumes
Switzerland	
copper	**SUVA (Switzerland, 2001). Notes: Not Temporary** Kurzzeitsgrenzwerte: 2 mg/m³ 15 minute(s). Form: Dust Kurzzeitsgrenzwerte: 0.2 mg/m³ 15 minute(s). Form: Dust and fumes MAK: 1 mg/m³ 8 hour(s). Form: Dust MAK: 0.1 mg/m³ 8 hour(s). Form: Dust and fumes
Belgium	
tin	**Lijst Grenswaarden (Belgium, 1998). Skin** VL: 2 mg/m³ 8 hour(s).
copper	**Lijst Grenswaarden (Belgium, 1998).** VL: 1 mg/m³ 8 hour(s). Form: Dusts and Mists VL: 0.2 mg/m³ 8 hour(s). Form: Fume
Spain	

Personal protective equipment

Skin and body : Lab coat.

Eyes : Safety glasses.

9. Physical and chemical properties

Physical state : Solid.

Colour : Silvery.

Odour : Not available.

pH : Not applicable.

Melting point : 228 to 250°C (442.4 to 482°F)

Flash point : Not applicable.

Explosive properties : Risks of explosion of the product in presence of mechanical impact: Not available.
Risks of explosion of the product in presence of static discharge: Not available.

Oxidizing properties : Not available.

Density : 5.8 g/cm³ (20°C / 68°F)

Solubility : Insoluble in cold water, hot water.

10. Stability and reactivity

Stability : The product is stable.

Hazardous decomposition products :

11. Toxicological information

Local effects

Chronic toxicity : Repeated or prolonged exposure is not known to aggravate medical condition.

12. Ecological information

Ecotoxicity Data

Ingredient Name	Species	Period	Result
copper	Daphnia magna (EC50)	48 hours	0.0318 mg/l
	Pimephales promelas (LC50)	96 hours	0.0094 mg/l

13. Disposal considerations

Methods of disposal ; Waste of residues ; Contaminated packaging : Waste must be disposed of in accordance with federal, state and local environmental control regulations.

European Waste Catalogue (EWC) : Not available.

Hazardous Waste : To present knowledge of the supplier, this product is not regarded as hazardous waste as defined by EU Directive 91/689/EC.

14. Transport information

International transport regulations

Regulatory Information	UN number	Proper shipping name	Class	Packing group	Label	Additional Information
ADR/RID Class	Not regulated.	-	-			-
IMDG Class	Not regulated.	-	-			-
IATA-DGR Class	Not regulated.	-	-			-

15. Regulatory information

EU Regulations

Risk Phrases : This product is not classified according to the EU regulations.

Product Use : Classification and labelling have been performed according to EU directives 67/548/EEC, 1999/45/EC, including amendments and the intended use.
- Industrial applications.

Additional Warning Phrases : Safety data sheet available for professional user on request.

EC Statistical Classification (Tariff Code) : 32089091

National regulations

Denmark

Netherlands

K-Klasse : K5

CPR : Not regulated.

SHHR : 0ZZ

Germany

Employment restrictions in accordance with § 15b of the Hazardous Substance Ordinance	:	No.
Hazardous Incident Ordinance	:	No.
Ordinance on Combustible Liquids	:	Class: Omitted
Technical instruction on air quality control	:	Class III 3.1.4: 1%
Hazard class for water	:	1

16. Other information

Full text of R-Phrases with no. appearing in Section 2 - Europe	:	None assigned.
Text of classifications appearing in Section 2 - Europe	:	None assigned.

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Prepared by	:	**Simon Hosken** **Environmental, Health and Safety Manager**

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