

SAFETY DATA SHEET

Soder-Wick(R) Lead-Free Desoldering Braid

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Identification of the substance or mixture

- Product name** : Soder-Wick(R) Lead-Free Desoldering Braid
Chemical name : Flux coated, braided copper wire
Synonyms : Soder-Wick(R) Lead Free, Soder-Wick(R) Lead-Free SD, Various codes based on size and length, including but not limited to: SW14025, SW14035, SW14045, 40-2-10, 40-2-5, 40-3-10, 40-3-5, 40-4-10, 40-4-5, 40-5-10
Product type : Solid.
Use of the substance/mixture : Solder remover.

Company/undertaking identification

- Manufacturer** : ITW Chemtronics
8125 Cobb Center Drive
Kennesaw, GA 30152
Tel. 770-424-4888 or toll free 800-645-5244

Distributor :

- Importer** : ITW Contamination Control BV
Saffierlaan 5
VZ-2132 Hoofddorp
The Netherlands
Tel: +31 88 1307 400
FAX: +31 88 1307 499

e-mail address of person responsible for this SDS : askchemtronics@chemtronics.com

Emergency telephone number (with hours of operation) : Chemtrec - 1-800-424-9300 or collect 703-527-3887

2. HAZARDS IDENTIFICATION

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

- Classification** : R42/43- May cause sensitization by inhalation and skin contact.
Physical/chemical hazards : FUMES MAY BE HARMFUL May be harmful by inhalation after often repeated exposure. Slightly hazardous by the following route of exposure: Skin contact irritant
Human health hazards : Caution: exposure to fumes from this material may cause certain sensitive individuals to develop eczema and/or occupational asthma. May cause sensitization by inhalation and skin contact. Sensitized persons may subsequently show asthmatic symptoms when exposed to atmospheric concentrations well below the OEL.
Additional hazards : May cause allergic reactions in certain individuals.

See Section 11 for more detailed information on health effects and symptoms.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/preparation : Mixture

Ingredient name	CAS number	%	EC number	Classification
Copper	7440-50-8	90 - 99	231-159-6	N; R50 [1] [2]
rosin	8050-09-7	1 - 10	232-475-7	R43 [1] [2]
See Section 16 for the full text of the R-phrases declared above.				

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

4. FIRST AID MEASURES

First aid measures

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- Inhalation** : Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
- Notes to physician** : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

See Section 11 for more detailed information on health effects and symptoms.

5. FIRE-FIGHTING MEASURES

Extinguishing media

- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
- Not suitable** : None known.
- Special exposure hazards** : No specific fire or explosion hazard.
Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. This material is very toxic to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
metal oxide/oxides
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.
- Methods for cleaning up**
- Small spill** : Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.

7. HANDLING AND STORAGE

- Handling** : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid release to the environment. Refer to special instructions/safety data sheet. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Storage** : Keep container tightly closed and sealed until ready for use.
- Packaging materials**
- Recommended** : Use original container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limit values

<u>Ingredient name</u>	<u>Occupational exposure limits</u>
Copper	ACGIH TLV (United States, 1/2009). TWA: 0.2 mg/m ³ 8 hour(s). Form: Fume
rosin	ACGIH TLV (United States, 1/2009). Notes: as Cu TWA: 1 mg/m ³ , (as Cu) 8 hour(s). EU OEL (Europe, 1989). Skin sensitizer. Inhalation sensitizer. Notes: TWA: 0.05 mg/m ³ 8 hour(s).

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.
- Exposure controls**
- Occupational exposure controls** : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Eye protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.
- Skin protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. PHYSICAL AND CHEMICAL PROPERTIES

General information

Appearance

- Physical state** : Solid.
- Color** : Copper.

Important health, safety and environmental information

- Boiling point** : 318°C (604.4°F)
- Melting point** : 1082.8°C (1981°F) This is based on data for the following ingredient: Copper.
- Flash point** : Closed cup: Not applicable. Open cup: Not applicable..
- Relative density** : Only known value: 8.94 (Water = 1) (Copper).

10. STABILITY AND REACTIVITY

Stability	: The product is stable.
Conditions to avoid	: Avoid release to the environment. Refer to special instructions/safety data sheet.
Materials to avoid	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. TOXICOLOGICAL INFORMATION**Potential acute health effects**

Inhalation	: May cause respiratory irritation. fumes
Ingestion	: No known significant effects or critical hazards.
Skin contact	: May cause skin irritation.
Eye contact	: May cause eye irritation. fumes

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Rosin	LD50 Oral	Rat	3 mg/kg	-

Potential chronic health effects

Skin	: May cause sensitization by skin contact.
Eyes	: May cause mild eye irritation.
Respiratory	: May cause sensitization by inhalation. Inhalation of this material may cause sensitive individuals to develop eczema and/or occupational asthma.

Chronic effects	: Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

Over-exposure signs/symptoms

Inhalation	: No specific data.
Ingestion	: No specific data.
Skin	: Adverse symptoms may include the following: irritation redness
Eyes	: No specific data.
Target organs	: Contains material which causes damage to the following organs: eye, lens or cornea. Contains material which may cause damage to the following organs: kidneys, liver, upper respiratory tract, skin.

12. ECOLOGICAL INFORMATION

Environmental effects	: Very toxic to aquatic organisms. Water polluting material. May be harmful to the environment if released in large quantities.
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Aquatic ecotoxicity

Product/ingredient name	Test	Result	Species	Exposure
Copper	-	Acute EC50 38 ug/L Fresh water	Crustaceans - Water flea - Chydorus sphaericus - Juvenile (Fledgling, Hatchling, Weanling) - <48 hours	48 hours
	-	Acute EC50 33.4 ug/L Fresh water	Crustaceans - Water flea - Chydorus ovalis - Juvenile (Fledgling, Hatchling, Weanling) - <48 hours	48 hours
	-	Acute EC50 20.2 ug/L Fresh water	Crustaceans - Water flea - Chydorus sphaericus - Juvenile (Fledgling, Hatchling, Weanling) - <48 hours	48 hours
	-	Acute EC50 18.8 ug/L Fresh water	Crustaceans - Water flea -	48 hours

12. ECOLOGICAL INFORMATION

-	Acute EC50 18.4 ug/L Fresh water	Crustaceans - Water flea - Simocephalus vetulus - Juvenile (Fledgling, Hatchling, Weanling) - <48 hours	48 hours
-	Acute EC50 16.1 ug/L Fresh water	Crustaceans - Water flea - Simocephalus vetulus - Juvenile (Fledgling, Hatchling, Weanling) - <48 hours	48 hours
-	Acute EC50 14.1 ug/L Fresh water	Crustaceans - Water flea - Chydorus sphaericus - Juvenile (Fledgling, Hatchling, Weanling) - <48 hours	48 hours
-	Acute EC50 9.89 ug/L Fresh water	Daphnia - Water flea - Daphnia longispina - Juvenile (Fledgling, Hatchling, Weanling) - <48 hours	48 hours
-	Acute EC50 9.2 ug/L Fresh water	Crustaceans - Water flea - Bosmina longirostris - Juvenile (Fledgling, Hatchling, Weanling) - <48 hours	48 hours
-	Acute EC50 9 ug/L Fresh water	Daphnia - Water flea - Ceriodaphnia dubia - Neonate - <24 hours	48 hours
-	Acute EC50 6.5 ug/L Fresh water	Daphnia - Water flea - Ceriodaphnia dubia - Neonate - <24 hours - 2.5 mm	48 hours
-	Acute EC50 6 to 8 ug/L Fresh water	Daphnia - Water flea - Ceriodaphnia dubia - Neonate - <24 hours - 2.5 mm	48 hours
-	Acute EC50 4 ug/L Fresh water	Daphnia - Water flea - Ceriodaphnia dubia - Neonate - <24 hours - 2.5 mm	48 hours
-	Acute EC50 2.8 ug/L Fresh water	Daphnia - Water flea - Ceriodaphnia dubia - Neonate - <24 hours - 2.5 mm	48 hours
-	Acute EC50 2.2 ug/L Fresh water	Daphnia - Water flea - Ceriodaphnia dubia - Neonate -	48 hours

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-	Acute EC50 2 to 4 ug/L Fresh water	<24 hours - 2.5 mm Daphnia - Water flea - Ceriodaphnia dubia - Neonate - <24 hours - 2.5 mm	48 hours
-	Acute EC50 1.6 ug/L Fresh water	Daphnia - Water flea - Ceriodaphnia dubia - Neonate - <24 hours - 0.25 mm	48 hours
-	Acute IC50 0.03 mg/L Marine water	Crustaceans - Amphipod - Ampelisca abdita	48 hours
-	Acute LC50 57 to 64 ug/L Fresh water	Crustaceans - Water flea - Simocephalus vetulus - <24 hours	48 hours
-	Acute LC50 30 ug/L Fresh water	Fish - Chinook salmon - Oncorhynchus tshawytscha - 3 months - 1.35 g	96 hours
-	Acute LC50 27.8 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling) - <1 months	96 hours
-	Acute LC50 24 ug/L Fresh water	Fish - Striped bass - Morone saxatilis - LARVAE - 16 days	96 hours
-	Acute LC50 20 ug/L Fresh water	Fish - Chinook salmon - Oncorhynchus tshawytscha - 3 months - 1.35 g	96 hours
-	Acute LC50 >20 ug/L	Fish - Chinook salmon - Oncorhynchus tshawytscha - 1.35 g	96 hours
-	Acute LC50 10.3 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling) - <1 months	96 hours
-	Acute LC50 >10 ug/L	Fish - Chinook salmon - Oncorhynchus tshawytscha - 1.35 g	96 hours
-	Acute LC50 9.4 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling) - <1 months	96 hours
-	Chronic NOEC 11.7 ug/L Fresh water	Fish - Chinook salmon - Oncorhynchus tshawytscha	96 hours

Conclusion/Summary : Not available.

Biodegradability

Date of issue/Date of revision : 6/9/2011.

12. ECOLOGICAL INFORMATION

- Conclusion/Summary** : Not available.
Other adverse effects : No known significant effects or critical hazards.

13. DISPOSAL CONSIDERATIONS

- Methods of disposal** : The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
- Hazardous waste** : The classification of the product may meet the criteria for a hazardous waste.

14. TRANSPORT INFORMATIONInternational transport regulations

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
ADR/RID Class	Not regulated.	-	-	-		-
ADN/ADNR Class	Not regulated.	-	-	-		-
IMDG Class	Not regulated.	-	-	-		Marine pollutant Limited quantity
IATA Class	Not regulated.	-	-	-		-

PG* : Packing group

15. REGULATORY INFORMATIONEU regulations

Classification and labeling have been determined according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and take into account the intended product use.

Hazard symbol or symbols :



Irritant

- Risk phrases** : R43- May cause sensitization by skin contact.
- Safety phrases** : S24- Avoid contact with skin.
S37- Wear suitable gloves.
S61- Avoid release to the environment. Refer to special instructions/safety data sheet.
- Contains** : rosin
- Product use** : Professional applications.
- Europe inventory** : All components are listed or exempted.

16. OTHER INFORMATION

Full text of R-phrases referred to in sections 2 and 3 - Europe : R43- May cause sensitization by skin contact.
R50- Very toxic to aquatic organisms.

Full text of classifications referred to in sections 2 and 3 - Europe : N - Dangerous for the environment

History

- Date of printing** : 6/9/2011.
- Date of issue/Date of revision** : 6/9/2011.
- Date of previous issue** : No previous validation.
- Version** : 7
- Prepared by** : Not available.

☑ Indicates information that has changed from previously issued version.

Notice to reader

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Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.