

**Safety data sheet pursuant to ordinance
(EC) No. 453/2010
(EC) No. 1907/2006 (REACH)**

Print date: 02/03/2016

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Revised:03.08.2015

Cimco-Werkzeugfabrik
Carl Jul. Müller GmbH & Co. KG

1. DESIGNATION OF THE MATERIAL OR MIXTURE AND COMPANY NAME

1.1 Product identifier

Product name Radio solder S - Pb60Sn40 (DIN EN 29453) with fluxing agent 1.1.2. (DIN EN 29 454) Art. No. **150104**
Trade name Radio solder S - Pb60Sn40 (DIN EN 29453) with fluxing agent 1.1.2. (DIN EN 29 454) Art. No. **150104**
CAS No.
EC No.

1.2 Relevant identified use of material or mixture and uses that are not advisable

Recommended
limitations of the
application

Use of the
material/mixture Solder for soft soldering

1.3 Details on the supplier who is making the safety data sheet available

Company Cimco Werkzeugfabrik Carl Jul. Müller GmbH & Co. KG
Hohenhagener Straße 1 - 5
D-42855 Remscheid, Germany
+49 (0) 21913718-01 Fax: +49 (0) 21913718-86

1.4 Emergency number **Emergency CONTACT (24-Hour-Number)**
GBK GmbH +49 (0)6132-84463

2. POSSIBLE HAZARDS

2.1 Classification of the material

Preparation, not hazardous within the meaning of the Hazardous Goods Act. Hazardous to health if dust or vapour is breathed in or swallowed.

2.2 Label elements

none

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3. COMPOSITION / INFORMATION ON COMPONENTS

Constituents	EC No.	CAS No.	Concentrate [% by weight]
Tin	231-141-8	7440-31-5	39.5 – 40.5 H302, H332, H360Df, H373, H410
Lead	231-100-4	7439-92-1	Remainder
Wood resin	232-475-7	8050-09-7	< 3.5 H317

4. FIRST AID MEASURES

4.1 Description of first aid measures

General information

Remove dirty, saturated clothing immediately.

After inhaling

While soldering, the workplaces need to be sufficiently ventilated or extracted. Regulations of professional associations as well as occupational health and safety regulations and hygiene rules need to be adhered to. Move the affected person into fresh air. If unwell, seek medical advice / consult doctor.

After skin contact

In the event of a burn, cool immediately for several minutes with running cold water. In case of serious burns, keep the wound sterile and cover it. Seek medical advice / consult doctor.

After swallowing

Seek medical advice / consult doctor.

After eye contact

Rinse out eye carefully with water for several minutes holding eyelid open. Remove any contact lenses potentially being worn if possible. Continue rinsing. Seek medical advice / consult doctor.

4.2 Important symptoms and effects which are acute or occur with a delay

No information is available.

4.3 Indication of any immediate medical attention and special treatment needed

No information is available.

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5. FIREFIGHTING MEASURES

5.1 Extinguishing agents

Suitable extinguishing agents Fine water spray, dry sand

Unsuitable extinguishing agents Direct water jet, foam

5.2 Particular risks associated with the material or mixture

The material itself does not burn. At the source of the fire, the effect of the heat on alloys containing lead can lead to vapours and smoke being generated. There is no smell as a warning. In the case of a fire, the hazardous burnt gases are lead vapour and lead oxide.

5.3 Information on fire fighting

Special protective equipment for firefighting:

In the presence of combustion or carbonization gases, any firefighting, rescue and clearing up activities should be undertaken only with heavy-duty respiratory protection and protective overalls.

Further information:

Avoid any of the fire fighting water penetrating surface waters, ground water and soil.

6. MEASURES IN THE EVENT OF ACCIDENTAL RELEASE

6.1 Person-related safety precautions, protective equipment and procedures to be followed in emergencies

Ensure there is fresh air in a closed room. Avoid dust formation. Do not breath in any gas/smoke/steam. Remove all people who are not involved and keep them upwind. Avoid contact with skin, eyes and clothing.

6.2 Environmental protection measures

Do not allow to enter sewage system / surface water / ground water. If substances enter bodies of water, soil or sewage system, inform the responsible authorities.

6.3 Methods and material for containment and cleaning

Collect mechanically (dry if possible). Take to recycling or disposal in suitable containers. Treat the collected materials as described in the "Disposal" chapter.

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6.4 References to other sections

Safe handling: see section 7

Disposal: see section 13

Personal protective equipment: see section 8

7. HANDLING AND STORAGE

7.1 Safety measures for safe handling

Information on safe handling

Ensure good ventilation at the workplace, with extraction if necessary. Do not breath in any smoke gases. Regulations from professional associations and hygiene regulations must be adhered to.

Hygiene measures

Do not smoke, eat, drink or sniff while working.
Wash hands before breaks and after finishing work.

Information on fire and explosion protection

No special measures required. The product is not flammable.

7.2 Conditions for safe storage taking incompatibilities into consideration

Storage requirements

No special requirements.

Information on storage with other products

Do not store with:
food, drink and animal feed, compressed, liquefied or gases dissolved under pressure, self-igniting materials
Materials which form flammable gases with water, develop flammable materials and oxidizing materials
flammable solid materials

Further information on storage conditions

No special measures required.

Storage class

7.3 Specific end use

See section 1.2

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8. LIMITATION AND MONITORING OF EXPOSURE / PERSONAL PROTECTIVE EQUIPMENT

8.1 Limit values

No information is available.

8.2 Limiting and monitoring exposure

Personal protective equipment

General protective and hygiene measures

The usual regulations for handling chemicals needs to be adhered to.

Do not breathe in dust/smoke/mist. Keep away from food, drink and animal feed. Do not smoke, eat or drink while working. Avoid contact with the eyes and skin. Wash hands before a break and after finishing work. At the end of work, a thorough whole body wash is recommended.

Respiratory protection

While soldering ensure good ventilation. This can be attained by local aspiration or general extracted air. If the occupational exposure limits are exceeded, suitable breathing apparatus must be worn.

Hand protection

Safety gloves (recommended, e.g. made of leather).

Eye protection

Tight fitting safety glasses.

Personal protection

Protective workwear.

Limiting and monitoring environmental exposure

Ensure good room ventilation, extraction at the workplace where necessary.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on the basic physical and chemical properties

Form	solid
Colour	Solder: silvery Fluxing agent: yellow to amber
Odour	Solder: odourless Fluxing agent: slight
Steam pressure	- na -
Relative density	- na -

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Boiling point	- na -
Melting point / Freezing point	Solder: 183 – 228 °C
Explosive properties	- na -
Self-ignition temperature	- na -
Ignition point	- na -
Flammability	- na -
Oxidizing properties	- na -
Solubility in / miscibility with	- na -
Ignition temperature	- na -
Solvent content	- na -
Solids content	- na -

9.2 Other information

No information is available.

10. STABILITY AND REACTIVITY

10.1 Reactivity

No information is available.

10.2 Chemical stability

No information is available.

10.3 Possible hazardous reactions

No information is available.

10.4 Conditions to be avoided

No information is available.

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10.5 Incompatible materials

Forms nitrous, hazardous gases with nitric acid. Violent reaction with oxidising agents.

10.6 Dangerous decomposition processes

Reacts with air and water and forms lead ions. Lead is not resistant to bases and lime mortar.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

	Value/Evaluation	Species	Method	Note
Acute oral	LD _{LO} 160 mg/kg TD _{LO} 450 mg/kg	Dove		Nerve damage
LC50 acute for inhalation	TC _{LO} 0.01 mg/l	Rat		Intestinal problems
Skin irritation	irritant			
Eye irritation	irritant			
Sensitisation skin	not sensitising			

Effects after repeated or lengthy exposure

Carcinogenicity: carcinogenic effect known in animal testing
 Mutagenicity: mutagenic effect known in animal testing
 Reproduction toxicity: reproduction toxic effect known in animal testing.

If ingested orally or inhaled, the proportion of lead, mobilised in the gastrointestinal tract and available in the gut can be reabsorbed in the organism. In the event of increased ingestion of lead compounds over a long time, this can lead to disruptions of the biosynthesis of haemoglobin and can cause irreversible nerve damage.

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12. ENVIRONMENTAL INFORMATION

12.1 Toxicity

No information is available.

12.2 Persistence and degradability

Lead and lead compounds are not biologically degradable.

12.3 Bio accumulation potential

No information is available.

12.4 Mobility in the soil

The mobility of lead ions is relatively low due to the tendency to form poorly soluble compounds.

12.5 Results of PBT and vPvB assessment

PBT Not applicable

vPvB Not applicable

12.6. Other harmful effects

Hazard to drinking water by forming water soluble lead salts.

13. INFORMATION ON DISPOSAL

Product Do not dispose of with the household waste, send waste back to the manufacturer for recycling.

Waste code Clarify the precise waste code according to the EWC catalogue with a disposal specialist.

Suggested marking: Waste code number 15 01 10*
(Packaging which contains residue of hazardous substances or is contaminated by hazardous substances).

Waste marked with an asterisk (*) are classed as hazardous waste according to Directive 2008/98/EC on hazardous waste.

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Unclean packaging

Disposal according to official regulations. Empty containers with hazardous residue need to be treated as special waste and must be disposed of correspondingly. Always consult the disposal specialist.

14. INFORMATION ON TRANSPORT

	ADR/RID	IMDG	IATA-DGR
14.1 UN number	-	-	-
14.2 Proper UN shipping name	-	-	-
14.3 Transport hazard class	-	-	-
14.4 Packaging group	-	-	-
14.5 Environmental hazards	-	-	-

14.6 Special preventive measures for the user

Not hazardous goods

14.7 Bulk transport according to Appendix II of the MARPOL agreement 73/78 and according to the IBC code

Not hazardous goods

15. STATUTORY REGULATIONS

15.1 Regulations on safety, health and environmental protection / specific legal regulations for the material or the mixture

As a general rule, special hazards are associated with chemicals. For this reason, they should only be handled with suitable care by appropriately trained people.

15.2 Chemical safety assessment

A chemical safety assessment for materials in this mixture have not been carried out.

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16. OTHER INFORMATION

Further information

National special provisions need to be implemented by each user on their own responsibility!

The information given is based on our current level of knowledge and serves to describe the product in terms of the safety precautions to be taken. It does not represent an assurance of properties of the product described.

Please pay attention to additional information! - Our safety data sheets have been prepared according to the valid EU guidelines WITHOUT taking into consideration any special national regulations regarding handling hazardous materials and chemicals.

H302	Hazardous to health if swallowed.
H317	Can cause allergic skin reactions.
H332	Hazardous to health if inhaled.
H360Df	Can cause damage to foetus in vitro. Can presumably impair fertility.
H373	Can damage organs in the event of lengthy or repeated exposure (state exposure method if conclusively verified that there is no danger with any other exposure method).
H410	Extremely toxic for water organisms, with long-term effects.