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Safety data sheet according to 1907/2006/EC, Article 31

SECTION 1: Identification of the substance/mixture and of the company/undertaking

· Date of compilation: 03.06.2011

· 1.1 Product identifier

· Trade name: Leaded Solder wire, alloy based on Tin-Lead or Lead-Tin

available Alloys: Sn60Pb40; Sn63Pb37, Sn64Pb36, Sn60Pb38Cu2; Sn60Pb38Ag2; Sn60Pb36Ag4; Sn62Pb36Ag2; Pb60Sn40; Pb90Sn10; Pb62Sn27Ag3; Pb93Sn5Ag2; Pb95,5Sn3Ag1,5; Pb62Sn25Bi10Ag3

incorporated Fluxes: LF2220NC; LF3135NC; LF3136NC; LF1110NC; F-SW26Q; FSW31Q; FSW-32Q; Brilliant 211; Cobar 390; Cobar 393; Cobar 395-90; Cobar 395-99

· Article number(s):

bz005

117***

 \cdot Synonym(s):

Bleihaltiges Röhrenlot, Legierungsbasis Zinn-Blei oder Blei-Zinn

mögliche Legierungen: Sn60Pb40; Sn63Pb37, Sn64Pb36, Sn60Pb38Cu2; Sn60Pb38Ag2; Sn60Pb36Ag4; Sn62Pb36Ag2; Pb60Sn40; Pb90Sn10; Pb62Sn27Ag3; Pb93Sn5Ag2; Pb95,5Sn3Ag1,5; Pb62Sn25Bi10Ag3 eingeschlossene Flussmittel: LF2220NC; LF3135NC; LF3136NC; LF1110NC; F-SW26Q; FSW31Q; FSW-32Q; Brilliant 211; Cobar 390; Cobar 393; Cobar 395-90; Cobar 395-90

- · 1.2 Relevant identified uses of the substance or mixture and uses advised against: No further relevant information available.
- · Application of the substance / the mixture: Solder Wire
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer / Supplier:

Balver Zinn

Josef Jost GmbH & Co.KG

Blintroper Weg 11

D-58802 Balve · Germany Phone: +49 2375 915 – 0 Fax: +49 2375 915 – 114 E-Mail: Info@BalverZinn.com

- · E-mail address of the competent person responsible for the Safety Data Sheet: kontakt@trabaserio.eu
- · Informing department: Technical Support of the Supplier
- · 1.4 Emergency telephone number: Giftnotruf Berlin +49 30 / 30686 790 Helpdesk in German and English

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS08 health hazard

Repr. 1A H360 May damage fertility or the unborn child.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS09 environment

Aquatic Acute 1 H400 Very toxic to aquatic life.

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.

(Contd. on page 2)

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(Contd. of page 1)



Acute Tox. 4 H302 Harmful if swallowed. Acute Tox. 4 H332 Harmful if inhaled.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC



T; Toxic

R61: May cause harm to the unborn child.



Xn; Harmful

R62-20/22: Possible risk of impaired fertility. Harmful by inhalation and if swallowed.

*

N; Dangerous for the environment

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R33: Danger of cumulative effects.

· Classification system:

The product contains Pb as an alloy with Sn, Ag & Cu.

This substance may not require a label according to Article 17 (see section 1.3 of Annex I / Table 3.1).

1.3.4. Metals in massive form, alloys, mixtures containing polymers, mixtures containing elastomers

1.3.4.1. Metals in massive form, alloys, mixtures containing polymers and mixtures containing elastomers do not require a label according to this Annex, if they do not present a hazard to human health by inhalation, ingestion or contact with skin or to the aquatic environment in the form in which they are placed on the market, although classified as hazardous in accordance with the criteria of this Annex.

1.3.4.2. Instead, the supplier shall provide the information to downstream users or distributors by means of the SDS

The product is an article and therefore has not to be classified and labelled in accordance with EC Directives.

· 2.2 Label elements

· Labelling according to EU guidelines:

Although classified the product does not present a danger to human health by inhalation, ingestion or contact with the skin or to the aquatic environment in the form in which it is placed on the market.

Preparation does not require a label according to Directive 67/548/EEC Annex VI No. 9.3.

Although the product does not require a label, all the information which should have appeared on the label shall be transmitted in the safety data sheet.

Although this product is not subject to identification regulations, we recommend that the safety suggestions are observed.

· Code letter and hazard designation of product:





T Toxic

N Dangerous for the environment

· Hazard-determining components of labelling: Lead (Pb)

· Risk phrases:

61 May cause harm to the unborn child.

(Contd. on page 3)

Printing date: 10.04.2013 Revision: 5 Revision: 10.04.2013

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(Contd. of page 2)

62 Possible risk of impaired fertility.

20/22 Also harmful by inhalation and if swallowed.

33 Danger of cumulative effects.

50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· Safety phrases:

- 53 Avoid exposure obtain special instructions before use.
- 9 Keep container in a well-ventilated place.
- When using do not eat or drink.
- 36/37 Wear suitable protective clothing and gloves.
- 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- 60 This material and its container must be disposed of as hazardous waste.

· Special labelling of certain preparations:

Contains lead. Should not be used on surfaces liable to be chewed or sucked by children Restricted to professional users.

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · **PBT**: not applicable
- · vPvB: not applicable

SECTION 3: Composition/information on ingredients

- · 3.2 Mixtures
- · Description: Alloy

· Dangerous components:		
CAS: 7439-92-1	Lead (Pb)	30 - 96%
EINECS: 231-100-4 Index number: 082-001-00-6	☑ T R61; ★ Xn R62-20/22; ₩ N R50/53 R33	
	 ♠ Repr. 1A, H360; STOT RE 2, H373 ♠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410 ♠ Acute Tox. 4, H302; Acute Tox. 4, H332 	
CAS: 7440-22-4 EINECS: 231-131-3	Silver (Ag) substance with a Community workplace exposure limit	0 - 5%
CAS: 7440-50-8 EINECS: 231-159-6	Copper (Cu) substance with a Community workplace exposure limit	0 - 3%

· Other components:		
CAS: 7440-31-5	Tin (Sn)	2 - 65%
EINECS: 231-141-8		
CAS: 65997-06-0	Rosin, hydrogenated	0 - 4%
EINECS: 266-041-3		
CAS: 7440-69-9	Bismuth (Bi)	0 - 10%
EINECS: 231-177-4		

· Additional information For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- General information: Measures are only required if dusts, vapours or fumes are formed during use.

(Contd. on page 4)

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· After inhalation:

If dust or other particles are generated during processing, it is nessecary to provide adequate ventilation and/or respiration protection. If dust/particles have been respirated call physician.

- · After skin contact: The product is not skin irritating.
- · After eye contact: Unlikely route of exposure.
- · After swallowing: Unlikely route of exposure.
- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Information for doctor: Treat symptomatically
- · 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents

Dry sand

Fire-extinguishing powder

Special powder for metal fires. Do not use water.

· For safety reasons unsuitable extinguishing agents



· 5.2 Special hazards arising from the substance or mixture:

Can be released in case of fire:

Lead oxide vapour or fume

Toxic or harmful metal oxides

Carbon monoxide (CO) and Carbon dioxide (CO₂)

Under certain fire conditions, traces of other toxic gases cannot be excluded.

- · 5.3 Advice for firefighters
- · Protective equipment:

Do not inhale combustion gases.

If necessary put on respirator.

· Additional information: Collect contaminated fire fighting water separately. It must not enter drains.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Use breathing protection against the effects of fumes/dust/aerosol.

· 6.2 Environmental precautions:

Do not allow to enter drainage system, surface or ground water.

Inform respective authorities in case product reaches water or sewage system.

Do not allow to enter the ground/soil.

· 6.3 Methods and material for containment and cleaning up:

Collect mechanically.

Dispose of the material collected according to regulations.

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

(Contd. on page 5)

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See Section 8 for information on personal protection equipment.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Ensure that suitable extractors are available on processing machines.

If dust/smoke is developed, avoid breathing dust/smoke.

Make sure that all applicable workplace limits are observed.

- · Information about protection against explosions and fires: Keep breathing equipment ready.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage
- · Requirements to be met by storerooms and containers:

Observe all local and national regulations for storage of water polluting products.

- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Store container in a well ventilated position.
- · 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · 8.1 Control parameters
- · Components with critical values that require monitoring at the workplace:

Respirable dusts cannot be liberated from the product as delivered.

respiratore amora cumitor oc	s to er area from the product as active can
7440-22-4 Silver (Ag)	
WEL (Great Britain)	Long-term value: 0.1 mg/m³
IOELV (European Union) Long-term value: 0.1 mg/m³	
7440-50-8 Copper (Cu)	
WEL (Great Britain)	Short-term value: 2** mg/m³
	Long-term value: $0.2*1**mg/m^3$
	*fume **dusts and mists (as Cu)

- · DNELs no data available
- · PNECs no data available
- · Additional information: The lists that were valid during the compilation were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment
- · General protective and hygienic measures

Do not eat, drink or smoke while working.

Do not inhale dust / smoke / mist.

Use skin protection cream for preventive skin protection.

Wash hands during breaks and at the end of the work.

- · Breathing equipment: Breathing equipment necessary if dusts or fumes are formed.
- Protection of hands:

Heat resistant gloves

Preventive skin protection by use of skin-protecting agents is recommended.

· Material of gloves

Carry heat insulating gloves by rough soldering work.

(Contd. on page 6)

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 $(Contd.\ of\ page\ 5)$

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

- · Penetration time of glove material Protective gloves should be replaced at first signs of wear.
- Eye protection: Safety glasses recommended during soldering works.

· Partition coefficient (n-octanol/water): not applicable

· Body protection:

Wear heat-resistant protective clothing when handling hot/molten product.

Protective clothing should be selected specifically for the working place.

General Information Appearance:	
Appearance:	
Form:	solid
rorm: Colour:	metallic
Colour.	silver-coloured
Smell:	odourless
Odour threshold:	not applicable
pH-value:	not applicable
Change in condition	
Melting point/Melting range:	183 °C - Sn63Pb37
	179 °C - Sn62Pb36Ag2
	296-301 °C - Pb93Sn5Ag2
Boiling point/Boiling range:	not applicable
Flash point:	not applicable
Inflammability (solid, gaseous)	The product is not flammable.
Ignition temperature:	not applicable
Decomposition temperature:	no data available
Self-inflammability:	The product/the substance is not selfigniting.
Danger of explosion:	Product is not explosive.
Critical values for explosion:	
Lower:	not applicable
Upper:	not applicable
Oxidizing properties	Not classified as oxidising.
Vapour pressure:	not applicable
Density	not determined
Settled apparent density	not applicable
Relative density	not determined
$Vapour\ density\ (AIR = 1)$	not applicable
Evaporation rate	not applicable

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· Viscosity:

dynamic:not applicablekinematic:not applicable

• 9.2 Other information See technical data sheet.

SECTION 10: Stability and reactivity

- 10.1 Reactivity see 10.3
- · 10.2 Chemical stability Stable, under normal conditions.
- · Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

- · 10.3 Possibility of hazardous reactions No dangerous reactions known.
- · 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials:

Strong oxidizing agents

Strong acids

· 10.6 Hazardous decomposition products:

Toxic or harmful metal oxides

Leadoxide vapour

Carbon monoxide (CO) and Carbon dioxide (CO2)

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: No irritant effect known.
- · on the eye: No irritant effect known.
- · Sensitization: No sensitizing effect known.
- · Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

· CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

Repr. Cat. 2: Product should be regarded as if it caused developmental toxicity to humans.

Repr. Cat. 3: Product causes concern for human fertility.

no data available

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · Additional ecological information:
- · Chemical Oxygen Demand (COD-value): not applicable
- · BOD5-value: not applicable
- · AOX-indication: The product does not contain organically bounded halogens (AOX-free).

(Contd. on page 8)

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· According to recipe contains the following heavy metals and compounds according to EC guideline NO. 76/464 EC:

2 - 65% Sn

30 - 96% Pb

0 - 10% Bi

 $0 - 5\%\,Ag$

0 - 3% Cu

- · 12.5 Results of PBT and vPvB assessment
- · **PBT**: not applicable
- · vPvB: not applicable
- · 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation



Disposal must be made according to official regulations.

Contact manufacturer for recycling information.

- · Waste disposal key number: According to local/national regulations.
- · European waste catalogue:

16 03 04 inorganic wastes other than those mentioned in 16 03 03

- · Uncleaned packagings:
- · Recommendation: Dispose of packaging according to regulations on the disposal of packagings.

14.1 UN-Number	
ADR, ADN, IMDG, IATA	Void
14.2 UN proper shipping name	
ADR, ADN, IMDG, IATA	Void
14.3 Transport hazard class(es)	
ADR, ADN, IMDG, IATA	
Class	Void
14.4 Packing group	
ADR, IMDĞ, IATA	Void
14.5 Environmental hazards:	not applicable
Marine pollutant:	NO
14.6 Special precautions for user:	not applicable
14.7 Transport in bulk according to Annex II of	·
MARPOL73/78 and the IBC Code:	not applicable
Additional Transportinformation:	Not dangerous according to the above specifications.

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· UN "Model Regulation":

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · National regulations
- · Information about limitation of use:

Employment restrictions concerning young persons must be observed.

Employment restrictions concerning pregnant and lactating women must be observed.

Employment restrictions concerning women of child-bearing age must be observed.

· Decree to be applied in case of technical fault:

Quantity limits according to "EC Seveso Directive" should be observed.

· Other regulations, limitations and prohibitive regulations

Observe restrictions on the marketing and use according to Annex XVII of Regulation (EC) No 1907/2006.

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases:

- H302 Harmful if swallowed.
- H332 Harmful if inhaled.
- H360 May damage fertility or the unborn child.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.

R20/22 Harmful by inhalation and if swallowed.

R33 Danger of cumulative effects.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R61 May cause harm to the unborn child.

R62 Possible risk of impaired fertility.

· Recommended restriction of use: Industrial use

· Department issuing MSDS:

TRABASERIO S.L.

C./Isabel II, N° 67, Pl. Baja A

07100 Sóller / Spain

Tel. & Fax: +34 971 63 34 64 · E-Mail: kontakt@trabaserio.eu

· Abbreviations and acronyms:

RID: Règlement concernant le transport international ferroviaire des marchandises dangereuses (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organization

GGVSEB (Gefahrgutverordnung Straße, Eisenbahn und Binnenschifffahrt): Ordinance on the national and international carriage of dangerous goods by road, rail, and inland waterways

ADR: Accord Européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

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GHS: Globally Harmonized System of Classification and Labelling of Chemicals CLP: Regulation on Classification, Labelling and Packaging of Substances and Mixtures

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

* Data compared to the previous version altered.

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