



STANNOL

SAFETY DATA SHEET

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

1.1. Product identifier

Trade name or designation of the mixture Lötzinn Sn/Pb Metall - Legierungen

Synonyms Lötzinn Pb60Sn40 * Lötzinn Pb65Sn35 * Lötzinn Pb70Sn30 * Lötzinn Pb75Sn25 * Lötzinn Pb88Sn12 * Lötzinn Pb92Sn8 * Lötzinn Pb95Sn5 * Lötzinn Sn50Pb50 * Lötzinn Sn60Pb40 * Lötzinn Sn63Pb37 * Lötzinn Sn64Pb36 * STANNOLOY * STRATOLOY * WSL-3 * DX_10HT

Issue date 30-July-2012

Version number 1.2

Revision date 19-September-2013

Supersedes date 09-September-2013

Product use Consumer use

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

Identified uses soft soldering

Uses advised against None known

1.3. Details of the supplier of the safety data sheet

Company name STANNOL GmbH

Address Oskarstr. 3-7
42283 Wuppertal
Germany

Contact person Dr. Sven Mönninghoff

Telephone number +49 (0) 202 585-129

Fax +49 (0) 202 585 155

e-mail sven.moeninghoff@stannol.de

Contact person HSE-BBS@bayer.com

Emergency telephone number +49 (0) 202 585 129 (8:00 a.m. – 4:00 p.m. (MET))

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

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

Remark: The classification for this article has been derived with the use of the regulations for mixtures.

Hazard summary

Physical hazards Not classified for physical hazards.

Health hazards Not classified for health hazards.

Environmental hazards Not classified for hazards to the environment.

Specific hazards Prolonged exposure may cause chronic effects.

Main symptoms Not available.

2.2. Label elements

Label according to Directive 67/548/EEC or 1999/45/EC as amended

EC number -

EC label Not available.

R-phrases Not available.

S-phrases Not available.

Authorisation number Not available.

Supplemental label information Remark: As an article, this product has not to be labelled pursuant to current EU-regulation.

2.3. Other hazards Not assigned.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Lead Metal (general- and high purity grade)	36 - 92	7439-92-1 231-100-4	-	082-001-00-6	#
Classification:	DSD: -				
	CLP: -				
Tin	8 - 64	7440-31-5 231-141-8	-	-	#
Classification:	DSD: -				
	CLP: -				

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

#: This substance has been assigned Community workplace exposure limit(s).

Composition comments The full text for all R-phrases is displayed in Section 16.

SECTION 4: First aid measures

General information Not available.

4.1. Description of first aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Thermal burn hazard - contact with hot material may cause thermal burns. Rinse skin with water/shower. Get medical attention if irritation develops and persists.

Eye contact Make sure to remove any contact lenses from the eyes before rinsing. Thermal burn hazard - contact with hot material may cause thermal burns. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed Not available.

4.3. Indication of any immediate medical attention and special treatment needed Not available.

SECTION 5: Firefighting measures

General fire hazards Not available.

5.1. Extinguishing media

Suitable extinguishing media Water fog. Dry sand. Powder.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture In case of fire, toxic and irritating gases may be formed.

5.3. Advice for firefighters

Special protective equipment for firefighters Firefighters should wear full protective clothing including self contained breathing apparatus.

Special fire fighting procedures Water runoff can cause environmental damage.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Keep unnecessary personnel away.

For emergency responders Not available.

6.2. Environmental precautions Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up Shovel up and place in a container for salvage or disposal.

6.4. Reference to other sections For personal protection, see section 8. For waste disposal, see section 13.

SECTION 7: Handling and storage

- 7.1. Precautions for safe handling** Avoid formation of dust and aerosols. Do not breathe mist or vapour. Avoid contact with hot material. Avoid prolonged exposure. Do not use in areas without adequate ventilation. When using, do not eat, drink or smoke. Use care in handling/storage.
- 7.2. Conditions for safe storage, including any incompatibilities** Store in a dry place. Store in original tightly closed container. Use care in handling/storage. Store in accordance with local/regional/national/international regulation.
- 7.3. Specific end use(s)** Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value
Lead Metal (general- and high purity grade) (7439-92-1)	TWA	0.15 mg/m ³

EU. Directive 98/24/EC: on the protection of workers from the risks related to chemical agents at work, Annex I List of Binding Occupational Exposure Limit Values

Components	Type	Value
Lead Metal (general- and high purity grade) (7439-92-1)	TWA	0.15 mg/m ³

EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU

Components	Type	Value
Tin (7440-31-5)	TWA	2 mg/m ³

Biological limit values

EU. Directive 98/24/EC: on the protection of workers from the risks related to chemical agents at work, Annex II Binding Biological Limit Values and Health Surveillance Measures

Components	Value	Determinant	Specimen
Lead Metal (general- and high purity grade) (7439-92-1)	70 µg/100 ml	Lead	Blood

Recommended monitoring procedures Follow standard monitoring procedures.

8.2. Exposure controls

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide adequate general and local exhaust ventilation.

Individual protection measures, such as personal protective equipment

- Eye/face protection** Wear safety glasses with side shields (or goggles) and a face shield.
- Skin protection**
- **Hand protection** When material is heated, wear gloves to protect against thermal burns.
 - **Other** Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.
- Respiratory protection** When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Dust filter P2 (for fine dust).
- Thermal hazards** Avoid contact with molten material.

Hygiene measures When using, do not eat, drink or smoke. Avoid contact with eyes. Avoid contact with skin. Handle in accordance with good industrial hygiene and safety practices.

Environmental exposure controls Not available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state	Solid.
Form	barren
Colour	Metallic.

Odour	Odourless.
Odour threshold	Not available.
pH	Not applicable.
Melting point/freezing point	183 - 290 °C (361.4 - 554 °F)
Initial boiling point and boiling range	Not available.
Flash point	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Vapour pressure	Not applicable.
Vapour density	Not applicable.
Relative density	Not available.
Solubility(ies)	insoluble
Partition coefficient (n-octanol/water)	Not available.
Decomposition temperature	Not available.
Viscosity	Not applicable.
Explosive properties	Not available.
Oxidizing properties	Not available.
9.2. Other information	
Density	7.00 - 9.00 g/ml @ 20 °C

SECTION 10: Stability and reactivity

10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid	None under normal conditions.
10.5. Incompatible materials	Strong oxidizing agents.
10.6. Hazardous decomposition products	No hazardous decomposition products are known.

SECTION 11: Toxicological information

General information Not available.

Information on likely routes of exposure

Ingestion	Not available.
Inhalation	Not available.
Skin contact	Not available.
Eye contact	Not available.

Symptoms Not available.

11.1. Information on toxicological effects

Components	Species	Test results
Lead Metal (general- and high purity grade) (7439-92-1)		
Acute		
<i>Dermal</i>		
LD50	Rat	> 2000 mg/kg, OECD Guideline 402
<i>Oral</i>		
LD50	Rat	> 5000 mg/kg, OECD Guideline 401
Skin corrosion/irritation	Not available.	
Serious eye damage/irritation	Not available.	
Respiratory sensitisation	Not available.	

Skin sensitisation	Not available.
Germ cell mutagenicity	Not available.
Carcinogenicity	Not available.
Reproductive toxicity	Not available.
Specific target organ toxicity - single exposure	Not available.
Specific target organ toxicity - repeated exposure	Not available.
Aspiration hazard	Not available.
Mixture versus substance information	Not available.
Other information	Not available.

SECTION 12: Ecological information

12.1. Toxicity	Not expected to be harmful to aquatic organisms.
12.2. Persistence and degradability	No data is available on the degradability of this product.
12.3. Bioaccumulative potential	Not available.
Partition coefficient n-octanol/water (log Kow)	Not available.
Bioconcentration factor (BCF)	Not available.
12.4. Mobility in soil	Not available.
12.5. Results of PBT and vPvB assessment	Not a PBT or vPvB substance or mixture.
12.6. Other adverse effects	Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods	
Residual waste	Dispose of in accordance with local regulations.
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal.
EU waste code	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Disposal methods/information	Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

SECTION 14: Transport information

ADR

14.1. UN number	UN3288
14.2. UN proper shipping name	Toxic solid, inorganic, n.o.s. (Lead Metal (general- and high purity grade))
14.3. Transport hazard class(es)	6.1 (PGIII)
Subsidiary class(es)	-
14.4. Packing group	III
14.5. Environmental hazards	No
Tunnel restriction code	E
Labels required	6.1
14.6. Special precautions for user	Not available.
Hazard ID	60

IATA

14.1. UN number	UN3288
14.2. UN proper shipping name	Toxic solid, inorganic, n.o.s. (Lead Metal (general- and high purity grade))
14.3. Transport hazard class(es)	6.1 (PGIII)
Subsidiary class(es)	-
14.4. Packing group	III
14.5. Environmental hazards	Not available.
Labels required	Not available.
ERG Code	6L

14.6. Special precautions for user Not available.

IMDG

14.1. UN number UN3288

14.2. UN proper shipping name Toxic solid, inorganic, n.o.s. (Lead Metal (general- and high purity grade)), Marine pollutant

14.3. Transport hazard class(es) 6.1 (PGIII)

Subsidiary class(es) -

14.4. Packing group III

14.5. Environmental hazards

Marine pollutant Yes

Labels required Not available.

EmS No. F-A, S-A

14.6. Special precautions for user Not available.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code This substance/mixture is not intended to be transported in bulk.

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I

Not listed.

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex II

Not listed.

Regulation (EC) No. 850/2004 on persistent organic pollutants, Annex I as amended

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1 as amended

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2 as amended

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3 as amended

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V as amended

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry

Lead Metal (general- and high purity grade) (CAS 7439-92-1)

Regulation (EC) No. 1907/2006, REACH Article 59(1) Candidate List as currently published by ECHA

Not listed.

Authorisations

Regulation (EC) No. 143/2011 Annex XIV Substances Subject to Authorisation

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

Lead Metal (general- and high purity grade) (CAS 7439-92-1)

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work

Not regulated.

Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding

Lead Metal (general- and high purity grade) (CAS 7439-92-1)

Other EU regulations

Directive 96/82/EC (Seveso II) on the control of major-accident hazards involving dangerous substances

Not regulated.

Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Lead Metal (general- and high purity grade) (CAS 7439-92-1)

Directive 94/33/EC on the protection of young people at work

Lead Metal (general- and high purity grade) (CAS 7439-92-1)

Other regulations	The product is classified and labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006. The product does not need to be labelled in accordance with EC directives or respective national laws.
National regulations	TRGS 505: lead and lead-containing hazardous substances
15.2. Chemical safety assessment	No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations	Not available.
References	Not available.
Information on evaluation method leading to the classification of mixture	Not available.
Full text of any statements or R-phrases and H-statements under Sections 2 to 15	None.
Training information	Not available.
Disclaimer	The information in the sheet was written based on the best knowledge and experience currently available.
SDS sections updated	This document has undergone significant changes and should be reviewed in its entirety.