1. Name of product, characterization and company name

Information on the product

Trade name: **Solder-wire HF32 S-Sn60Pb40**

Usage of the product / preparation Solder wire for soft soldering

Identification of the manufacturer / supplier

Address: Stannol GmbH
Oskarstr. 3 -7
42283 Wuppertal

Phone: 0202 585 0

Fax: 0202 585 155

Emergency call: 0202 585 119 (only during trading hour (8:00 h – 17:00 h)

E-mail: werner.kruppa@stannol.de

2. Possible hazards:

Not a composition for the purposes of the Dangerous Substances Regulations, but nevertheless observe items 4-16

Additional hazards for human health and environment:

May cause occupational asthma

3. Composition/Information on the components

Chemical characterization: Tin/Lead – alloy with flux max.3,5 % (halide free)

Composition according to EC 1907/2006:

Contents	CAS No.	EINECS No.	Symbols	R-phrases:	Substance
59,5-60,5%	7440-31-5	231-141-8			Tin
Remainder	7439-92-1	231-131-3			Lead
<3,5%	8050-09-7	232-475-7	Xi	43	Rosin

The wording of the R-phrases stated is indicated in Section 16

4. First Aid measures

General information: If casualty is unconscious but breathing, place in the recovery position. If breathing has stopped apply artificial resuscitation or give oxygen by mask

After inhalation: Remove patient to fresh air. If irritation resists, obtain medical attention.

After skin contact: If any skin irritation develops seek medical attention

After eye contact: Flush ***immediately*** with plenty of water. In cases where spitting flux has entered the eye seek medical attention.

After ingestion: Rinse mouth immediately and drink plenty of water. Seek medical advice.

Hints for doctors. Inhalation of the flux fumes given off at soldering temperatures will irritate the nose, throat and respiratory system. Repeated or prolonged exposure to flux fumes may cause shortness of breath and cough..

Physician's information

Treatment: Decontamination, treatment of symptoms.

5. Fire fighting measures

Suitable extinguishing media: Use extinguishing media appropriate to surrounding fire conditions

Special protective equipment for fire fighting Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6. Accidental release measures

Pick up and place in appropriate container

7. Handling and storage

The fumes produced during soldering should be extracted away from the breathing zone of the operators. Ensure the area is well ventilated. Wash hands with soap and warm water after handling, particularly before eating, drinking or smoking.

The product should be stored in a cool, dry area.

8. Exposure controls and personal protection

Additional information on system design:
Local exhaust or dilution ventilation and control of process conditions are suitable methods..

Substances with limit values to be monitored at the working place:

Danger to health at the working place:
Peak limit category:

Working place limit values according to TRGS 900 from Section 2 for Germany:

Product name	CAS No.	ml/m³ (ppm)	mg/m³	Type	Category	Remarks
Tin	7440-31-5		2	MAK (NL)		
Lead	7439-92-1		0,1	MAK (TLV)		

BAT-Value	Lead/blood level:	700µg/l,	
	Women below 45 years:	300µg/l	

Skin resorption / Sensitization: Skin resorption ---- **Sensitization: S (rosin)**

General protection and hygiene measures
Avoid direct contact with eyes, the skin and clothing.

Personal protection

Respiratory protection:	If concentrations are over the exposure limit, use a supplied air respirator.
Hand protection:	Use heat resistant gloves if required.
Eye protection:	Operators should wear goggles
Personal protection:	Light protective clothing

9. Physical and chemical properties

Form:	Form: **Tin - Lead Solder**
	Colour:silver
Melting Point:	183 °C
Vapour Pressure:	n.a.
Density(20°C):	7-9 g/cm³

10. Stability and reactivity

Reaction with substances:	Possible with oxidising agents.
Hazardous combustion or decomposition products:	Lead-oxides possible

11. Toxicological information

The toxicological classification of the product is based on the results of the calculation procedure of the general preparation directive

1999/45/EC.

Acute Effects:

Acute intoxication by ingestion of skin contact with lead is inprobable. High doses nevertheless lead to symptoms of poisoning. Inhalation of fumes can irritate the respiratory tract and eyes..

Contamination trough skin contact and inhalation:

All following items refer to pure lead

Acute Toxicity

Type	Value in mg/Kg	Form	Species
LD.LO	160	oral	pigeon
LD.LO	1000	ip	rat

LD.LO (oral, pigeon): 160 mg/kg; TD.LO (oral, woman): 450 mg/kg (damage to nervous system); LD.LO (ip., Rat): 1000 mg/kg; TC.LO (inhal., human): 10 mg/m^3 ;

12. Ecological information

General information: Lead and combinations of lead are not biological reducible.

13. Disposal considerations

Disposal information

Product:	Contact a licensed professional waste disposal service to dispose of this material**.**
Further information:	Observe all federal, state and local environmental regulations. Collect metal for recycling
Waste identity number:	Waste identity number EAK-code: 120104

14. Transport information

GGVSEB/ADR/RID:	The product is not classified as hazardous for transport

15. Legal regulations:

Labelling information:	**The product is classified and labelled according to the EC Directives.** Not subject to current legislation
Water hazard class:	WGK 1 (weakly water-endangering)
Classification according to the TA Luft:	Organic materials class III; whole-carbon-concentration: Max. acceptable Emission50 mg/m^3 (mass-flow-rate >= 0,5 kg/h)
Ingredients:	Tin, Lead, rosin

16. Further information

R-phrases point 3: 43 May cause sensitization by skin contact

n.a. not applicable

n.k. not known

German regulations:
See TRGS 505 “Lead and leaded dangerous compounds”

This statement is based on our current knowledge and offers no assurance of product properties.

Department issueing the data sheet
Stannol GmbH/Quality Assurance/Laboratory

Contact person
Dr. Kruppa