

SAFETY DATA SHEET

Sn60 Pb40 Fluitin 1535/322 1mm 0.5kg 10kg

1. Identification of the preparation and of the company

Product name : Sn60 Pb40 Fluitin 1535/322
1mm 0.5kg 10kg

Code : 45156

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Material uses : soldering

2 Hazards identification

The preparation is not classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : Not classified.

Effects and symptoms

Inhalation : May be harmful if inhaled

Ingestion : May be harmful if swallowed

Skin contact : Slightly hazardous by the following route of exposure: of skin contact (irritant).

Toxicity data

: **lead**: Warning. Contains lead.

Over-exposure signs/symptoms:- blood formation impairment, central nervous system depression

May cause harm to the unborn child.

Repeated or prolonged exposure to the substance can produce reproductive system damage.

rosin: CAUTION: Certain sensitive individuals may develop eczema and/or occupational asthma on exposure to this material.

Sensitised persons may subsequently show asthmatic symptoms when exposed to atmospheric concentrations well below the OEL.

Additional warning phrases : Contains rosin. May produce an allergic reaction. Safety data sheet available for professional user on request.

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

3 Composition/information on ingredients

Substance/preparation : Preparation

Ingredient name	CAS number	%	EC number	Classification
Europe				

Date of issue : 10/07/2007.

1/8

3 Composition/information on ingredients

tin	7440-31-5	40 - 60	231-141-8	Not classified. Repr. Cat. 1; R61 Repr. Cat. 3; R62 Xn; R20/22 R33 N; R50/53 R43
lead	7439-92-1	30 - 40	231-100-4	
rosin	8050-09-7	1 - 5	232-475-7	
See section 16 for the full text of the R-phrases declared above				

* Occupational Exposure Limit(s), if available, are listed in Section 8

* The classifications listed, indicate the potential hazards of the ingredients

4. First-aid measures

First-aid measures

- Skin contact** : Flush contaminated skin with plenty of water. Cuts should be treated promptly and covered.
- Eye contact** : Get medical attention if any damage to the eye is caused by the metal.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.
- 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.
- Hazardous combustion products** : Decomposition products may include the following materials:
metal oxide/oxides
- Special protective equipment for fire-fighters** : No special protection is required.

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.
- Environmental precautions** : No specific hazard.
- Large spill** : Restack safely. Take care with items that are sharp or heavy.
- Small spill** : Restack safely. Take care with items that are sharp or heavy.

7. Handling and storage

- Handling** : Put on appropriate personal protective equipment (see section 8). Workers should wash hands and face before eating, drinking and smoking. Take care with items that are sharp or heavy.
- Storage** : Store in accordance with local regulations.
- Packaging materials**
- Recommended** : Use original container.

8. Exposure controls/personal protection

Exposure limit values

<u>Ingredient name</u>	<u>Occupational exposure limits</u>
Europe	
tin	ACGIH TLV (United States, 1/2006). TWA: 2 mg/m ³ 8 hour(s).
lead	EU OEL (Europe, 5/2006). Notes: Binding 8 hours: 0.15 mg/m ³ 8 hour(s).
Sweden	
lead	AFS (Sweden, 6/2005). TWA: 0.05 mg/m ³ 8 hour(s). Form: respirable dust TWA: 0.1 mg/m ³ 8 hour(s). Form: total dust
Denmark	
lead	Arbejdstilsynet (Denmark, 4/2005). Notes: Calculated as Pb TWA: 0.05 mg/m ³ , (Calculated as Pb) 8 hour(s). Form: Powder, dust and fumes
Norway	
lead	Arbejdstilsynet (Norway, 10/2003). Notes: Calculated as Pb TWA: 0.05 mg/m ³ , (Calculated as Pb) 8 hour(s). Form: Dust and fumes
France	
lead	INRS (France, 6/2006). Notes: Regulatory binding exposure limits TWA: 0.1 mg/m ³ 8 hour(s).
rosin	INRS (France, 6/2006). Notes: indicative exposure limits TWA: 0.1 mg/m ³ 8 hour(s).
Netherlands	
lead	Nationale MAC-lijst (Netherlands, 7/2006). Notes: Legal indicates a statutory value, Administrative indicates an administrative value that is not legally binding (see background). OEL, 8-h TWA: 0.15 mg/m ³ 8 hour(s). Form: respirable dust and fume
Germany	
lead	EU OEL (Europe, 5/2006). Notes: Binding 8 hours: 0.15 mg/m ³ 8 hour(s).
Finland	
tin	Työterveyslaitos (Finland, 2002). TWA: 2 mg/m ³ 8 hour(s).
lead	Työterveyslaitos, Sosiaali- ja terveysministeriö (Finland, 4/2005). Notes: Calculated as Sn TWA: 2 mg/m ³ , (Calculated as Sn) 8 hour(s).
	EU OEL (Europe, 5/2006). Notes: Binding 8 hours: 0.15 mg/m ³ 8 hour(s).
United Kingdom (UK)	
tin	EH40-OES (United Kingdom (UK), 2002). TWA: 2 mg/m ³ 8 hour(s). STEL: 4 mg/m ³ 15 minute(s).
lead	EH40-OES (United Kingdom (UK), 2002). TWA: 0.15 mg/m ³ 8 hour(s).
rosin	EH40-WEL (United Kingdom (UK), 9/2006). WEL 8 hrs limit: 0.15 mg/m ³ 8 hour(s).
	EH40-MEL (United Kingdom (UK), 2002). Skin sensitiser, Inhalation sensitiser TWA: 0.05 mg/m ³ 8 hour(s). Form: Rosin-based solder flux fume STEL: 0.15 mg/m ³ 15 minute(s). Form: Rosin-based solder flux fume
Austria	

8. Exposure controls/personal protection

tin	GKV_MAK (Austria, 6/2006). STEL: 4 mg/m ³ , 4 times per shift, 15 minute(s). Form: Inhalable fraction TWA: 2 mg/m ³ 8 hour(s). Form: Inhalable fraction
lead	GKV_MAK (Austria, 6/2006). STEL: 0.4 mg/m ³ , 4 times per shift, 15 minute(s). Form: Inhalable fraction TWA: 0.1 mg/m ³ 8 hour(s). Form: Inhalable fraction
Switzerland	
lead	EU OEL (Europe, 5/2006). Notes: Binding 8 hours: 0.15 mg/m ³ 8 hour(s).
Belgium	
tin	Lijst Grenswaarden / Valeurs Limites (Belgium, 3/2006). Skin TWA: 2 mg/m ³ 8 hour(s).
lead	Lijst Grenswaarden / Valeurs Limites (Belgium, 3/2006). Notes: As Pb TWA: 0.15 mg/m ³ , (As Pb) 8 hour(s). Form: dust and fumes
Spain	
tin	INSHT (Spain, 1/2006). TWA: 2 mg/m ³ 8 hour(s).
lead	INSHT (Spain, 1/2006). TWA: 0.15 mg/m ³ 8 hour(s).
Turkey	
lead	EU OEL (Europe, 5/2006). Notes: Binding 8 hours: 0.15 mg/m ³ 8 hour(s).
Czech Republic	
lead	178/2001 (Czech Republic, 6/2004). STEL: 0.2 mg/m ³ 10 minute(s). TWA: 0.05 mg/m ³ 8 hour(s).
Ireland	
lead	NAOSH (Ireland, 3/2002). OELV-8hr: 0.15 mg/m ³ 8 hour(s).
Italy	
lead	Ministero della Salute (Italy, 3/2004). TWA: 0.15 mg/m ³ 8 hour(s).
Estonia	
lead	Sotsiaalminister (Estonia, 9/2001). TWA: 0.05 MG/M3 8 hour(s). Form: inhalable dust TWA: 0.1 MG/M3 8 hour(s). Form: total dust
Lithuania	
lead	Del Lietuvos Higienos Normos (Lithuania, 12/2001). TWA: 0.15 MG/M3 8 hour(s). Form: Inhalable fraction TWA: 0.07 MG/M3 8 hour(s). Form: Respirable fraction
Slovakia	
lead	Nariadenie Vlady Slovenskej republiky (Slovakia, 5/2006). TWA: 0.15 mg/m ³ 8 hour(s).
Hungary	
lead	EüM-SzCsM (Hungary, 11/2002). Notes: as Pb PEAK: 0.6 mg/m ³ , (as Pb) 15 minute(s). PEAK: 0.2 mg/m ³ , (as Pb) 15 minute(s). Form: Respirable TWA: 0.15 mg/m ³ , (as Pb) 8 hour(s). TWA: 0.05 mg/m ³ , (as Pb) 8 hour(s). Form: Respirable
Poland	

8. Exposure controls/personal protection

tin	Ministra Pracy I Polityki Społecznej (Poland, 10/2005). Notes: Calculated as Sn TWA: 2 mg/m ³ , (Calculated as Sn) 8 hour(s). Form: smokes and dusts
lead	Ministra Pracy I Polityki Społecznej (Poland, 10/2005). Notes: Calculated as Pb TWA: 0.05 mg/m ³ , (Calculated as Pb) 8 hour(s).
Slovenia	
lead	Uradni list Republike Slovenije (Slovenia, 4/2005). PEAK: 0.4 MG/M3, 4 times per shift, 15 minute(s). Form: Inhalable fraction TWA: 0.1 MG/M3 8 hour(s). Form: Inhalable fraction
Latvia	
lead	LV Nat. Standardisation and Meterological Centre (Latvia, 11/2004). STEL: 0.01 MG/M3 15 minute(s). TWA: 0.005 MG/M3 8 hour(s).
rosin	LV Nat. Standardisation and Meterological Centre (Latvia, 11/2004). TWA: 4 MG/M3 8 hour(s).
Greece	
tin	PD 90/1999 (Greece, 2/2003). TWA: 2 MG/M3 8 hour(s).
lead	PD 90/1999 (Greece, 2/2003). TWA: 0.15 MG/M3 8 hour(s).
Portugal	
tin	Instituto Português da Qualidade (Portugal, 7/2004). TWA: 2 MG/M3 8 hour(s).
lead	Instituto Português da Qualidade (Portugal, 7/2004). TWA: 0.05 MG/M3 8 hour(s).

Exposure controls

Occupational exposure controls	: No special ventilation requirements.
Hygiene measures	: Wash thoroughly after handling.
Respiratory protection	: Not applicable. Recommended: particulate filter EN 149:2001 FFP3
Hand protection	: Use strong, cut-resistant gloves suitable for handling metals. <1 hours (breakthrough time): disposable vinyl
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, gases or dusts. Recommended: safety glasses with side-shields EN 166 1F
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. Recommended: overall

9. Physical and chemical properties

General information

Appearance

Physical state	: Solid.
Colour	: Silvery.

Important health, safety and environmental information

Melting point	: 183 to 188°C (361.4 to 370.4°F)
Solubility	: Insoluble in the following materials: cold water and hot water.

Date of issue : 10/07/2007.

5/8

10. Stability and reactivity

Stability	: The product is stable. Under normal conditions of storage and use, hazardous polymerisation will not occur.
Conditions to avoid	: No specific data.
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

Skin contact : No known significant effects or critical hazards.

Acute toxicity

Over-exposure signs/symptoms

Target organs : Contains material which causes damage to the following organs: blood, kidneys, gastrointestinal tract, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.

Product name	List name	Name on list	Classification	Notes
United Kingdom (UK) lead	UK Occupational Exposure Limits EH40 WEL	lead	Carc. Carc	
Netherlands lead		lood Metallisch	Repro. fertility category 3	
Germany lead	Germany TRGS905	Blei Metall, bioverfügbar	RF3	
France lead	France Occupational Exposure Limits	plomb Métallique	Carc. C1, Carc. C2, Carc. C3, Repro. R1, Repro. R2, Repro. R3	

12. Ecological information

Aquatic ecotoxicity

Product/ingredient name	Test	Result	Species	Exposure
lead	Mortality	Acute LC50 542 mg/L	Fish	96 hours
	Mortality	Acute LC50 471 mg/L	Fish	96 hours
	Mortality	Acute LC50 1.17 mg/L	Fish	96 hours

Biodegradability

Other adverse effects : No known significant effects or critical hazards.

Date of issue : 10/07/2007.

6/8

13. Disposal considerations

- Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. 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.
- European waste catalogue (EWC)** : 06 04 05* wastes containing other heavy metals
- Hazardous waste** : Yes.

14. Transport information

International transport regulations

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
ADR/RID Class	Not regulated.	-	-	-		-
IMDG Class	Not regulated.	-	-	-		-
IATA Class	Not regulated.	-	-	-		-

PG* : Packing group

15. Regulatory information

EU 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.

- Risk phrases** : This product is not classified according to EU legislation.
- Product use** : Consumer applications, Industrial applications.

Other EU regulations

Additional warning phrases : Contains rosin. May produce an allergic reaction. Safety data sheet available for professional user on request.

France

Professional disease or diseases : lead
rosin
RG 1
65, 66

Germany

Hazard class for water : nwg Appendix No. 4

Technical instruction on air quality control : TA-Luft Number 5.2.1: 61%
TA-Luft Class I - Number 5.2.7.1.3: 39%

Italy

Emission control directive : Not classified.

16. Other information

- Full text of R-phrases referred to in sections 2 and 3 - Europe** : R61- May cause harm to the unborn child.
R62- Possible risk of impaired fertility.
R20/22- Harmful by inhalation and if swallowed.
R43- May cause sensitisation by skin contact.
R33- Danger of cumulative effects.
R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- Full text of classifications referred to in sections 2 and 3 - Europe** : Repr. Cat. 1 - Toxic to reproduction Category 1
Repr. Cat. 3 - Toxic to reproduction Category 3
Xn - Harmful
N - Dangerous for the environment

Date of issue : 10/07/2007.

7/8

16. Other information

History

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Date of previous issue	: No previous validation.
Version	: 3
Prepared by	: Simon Hosken Environmental, Health and Safety Manager

✔ Indicates information that has changed from previously issued version.

References

The Health and Safety At Work Act 1974, section 6.
Control of Substances Hazardous to Health (CoSHH) Regulations 2002 and its amendments.

Preparation contains solely TSCA and EINECS listed substances.

This safety data sheet has been prepared in accordance with the requirements of the Chemicals (Hazard Information and Packaging for Supply) Regulations 2002 which implement EC Directives 1999/45/EC and 2001/58/EC and their amendments.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

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.