SDS REPORT

No.: C3201020012-CO DATE: Oct. 27, 2020

APPLICANT:

Ningbo welding material factory
Meilin, Zhuangqiao, Ningbo

DESCRIPTION OF SAMPLES:

Sample Name	:	Solder
Model No.	:	Sn61.9 Pb36.3 rosin1.8
Brand Name	:	/
Manufacturer Name	:	Ningbo welding material factory
Buyer Name	:	/
Country of Origin	:	/
Country of Destination	:	Overseas
Sample Receiving Date	:	Oct. 21, 2020
Testing Period	:	Oct. 21, 2020 to Oct. 27, 2020
Service Requested	:	Safety Data Sheet (SDS) for the sample with submitted composition.
Summary	:	As per request, the contents and formats of the SDS are prepared in accordance with Regulation (EC) No 1907/2006, 1272/2008, Regulation (EU) No 2015/830 and are provided per attached.

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

· 1.1 Product identifier

· Trade name: *Solder*

· Other means of identification: *Data not available*

· Registration number: *Data not available*

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

· Application of the substance/ mixture: *Solder wire.*

· Uses advised against: *All other uses.*

· 1.3 Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

Ningbo welding material factory

Meilin, Zhuangqiao, Ningbo

Tel: *+86-87355461*

Email: */*

· Only Representative/other EU contact point: *No information available.*

· Further information obtainable from: *Ningbo welding material factory*

· 1.4 Emergency telephone number

General in EU

Tel: 112 (Available 24 hours a day)

SECTION 2: Hazards identification

· 2.1 Classification of the substance or mixture

Classification according to regulation (EC) 1272/2008:

GHS08 Health hazard

Repr.1A H360FD May damage fertility or the unborn child

Lact., H362 May cause harm to breast-fed children

STOT RE 1 H372 Causes damage to central nervous system, blood and kidneys through prolonged or repeated exposure by inhalation or ingestion

GHS07 Exclamation mark

Skin Sens. 1 H317 May cause an allergic skin reaction

· Classification system:

The classification is according to the latest edition of Regulation 1272/2008, and extended by company and literature data.

· 2.2 Label elements

· Labeling according to Regulation (EC) No 1272/2008: *The product is labelled according to Regulation (EC) No 1272/2008.*

· Hazard pictograms:

GHS07 GHS08

· ***Signal word:*** *Danger*

· ***Hazard-determining components of labelling:*** *Lead; Rosin*

· ***Hazard statements:***

H317	*May cause an allergic skin reaction*
H360FD	*May damage fertility or the unborn child*
H362	*May cause harm to breast-fed children*
H372	*Causes damage to central nervous system, blood and kidneys through prolonged or repeated exposure by inhalation or ingestion*

· ***Precautionary statement:***

P201	*Obtain special instructions before use.*
P260	*Do not breathe dust.*
P263	*Avoid contact during pregnancy and while nursing.*
P280	*Wear protective gloves/protective clothing/eye protection/face protection.*
P308 + P313	*IF exposed or concerned: Get medical advice/attention.*
P501	*Dispose of contents/container in accordance with local/regional/national/international regulation.*

· ***Additional information:***

Important! This product contains substance that is of restricted use under Annex XVII of Regulation (EC) No. 1907/2006. For details, please refer to Section 15 of this Safety Data Sheet.

· ***2.3 Other hazards***

· ***Results of PBT and vPvB assessment***

PBT: *Not applicable*

vPvB: *Not applicable*

SECTION 3: Composition/information on ingredients

· ***3.1 Chemical characterization:*** *Mixture*

· ***Description:***

Mixture of the substances listed below with nonhazardous additions; For the wording of the listed risk phrases refer to section 16.

Substance	***CAS No.***	***Index No.***	***EC No.***	***Conc. w/w***	***CLP Classification***	***SCL/M-factor***
Tin	*7440-31-5*	*-*	*231-141-8*	*61.9%*	*None*	*-*
Lead	*7439-92-1*	*082-014-00-7*	*231-100-4*	*36.3%*	*Repr. 1A, H360FD* *Lact., H362* *STOT RE 1, H372*	*-*
Rosin	*8050-09-7*	*650-015-00-7*	*232-475-7*	*1.8%*	*Skin Sens. 1, H317*	*-*

SECTION 4: First aid measures

· ***4.1 Description of first aid measures***

General advice: *Get medical attention if you feel unwell.*

After inhalation: *Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor, if you feel unwell.*

After skin contact: *Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.*

After eye contact: *Rinse eyes with water. If eye irritation occurs: Get medical advice/attention.*

After swallowing: *Wash mouth. Do NOT induce vomiting; Never give anything by mouth to an unconscious person. Get medical attention if you feel unwell.*

· ***4.2 Most important symptoms and effects, both acute and delayed:*** *May cause an allergic skin reaction; May damage fertility or the unborn child; May cause harm to breast-fed children.*

· ***4.3 Indication of any immediate medical attention and special treatment needed:*** *Treatment according to symptoms, no known specific medicine.*

SECTION 5: Fire-fighting measures

· ***5.1 Extinguishing media***

· ***Suitable extinguishing agents:*** *Use CO_2, chemical powder, water spray or alcohol resistant foam to extinguish.*

· ***Unsuitable extinguishing media:*** *Water with full jet.*

· ***5.2 Special hazards arising from the substance or mixture:*** *May produce allergic / harmful dust.*

· ***5.3 Advice for firefighters***

Protective equipment: *Wear an approved positive pressure self-contained breathing apparatus (Comply with EN 133).*

SECTION 6: Accidental release measures

· ***6.1 Personal precautions, protective equipment and emergency procedures:***

· ***6.1.1 For non-emergency personnel***

Protective equipment: *Wear protective gloves/protective clothing/eye protection/face protection.*

Emergency procedures: *Cut off leakage source and collect spillage timely if safe do it; Evacuate immediately; Ensure good ventilation; Avoid contact with skin and eyes.*

· ***6.1.2 For emergency responders***

Personal protective equipment: *Wear protective gloves/protective clothing/eye protection/face protection.*

· ***6.2 Environmental precautions:***

Prevent further leakage or spillage if safe to do so; Prevent spillage from entering drains, sewer, basement or confined areas; if the spillage contaminates rivers, lakes or drains inform respective authorities.

· ***6.3 Methods and material for containment and cleaning up:***

Sweep up and shovel into suitable containers for disposal; Ensure good ventilation; Dispose contaminated material as waste according to section 13.

· ***6.4 Reference to other sections:***

See section 7 for information on safe handing; See section 8 for information on personal protection equipment; See section 13 for disposal in formation.

SECTION 7: Handling and storage

· ***7.1 Precautions for safe handling:***

Ensure adequate ventilation at workplace; Wear protective gloves/protective clothing/eye protection/face protection; Avoid contact with skin and eyes.

· ***Information about fire and explosion protection:*** *Normal measures for preventive fire protection.*

· ***7.2 Conditions for safe storage, including any non-compatibility***

· ***Requirements to be met by storerooms and receptacles:*** *Store in a cool, dry and well-ventilated place.*

· **Information about storage in one common storage facility:** Keep away from acid.

· **Further information about storage conditions:** Store locked up.

· **7.3 Specific end use(s):** See section 1.2.

SECTION 8: Exposure controls/personal protection

· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

Country	Limit value - Eight hours	Limit value - Short term
7440-31-5 Tin, metal		
Belgium	2 mg/m³It can be the result of both direct contact and its presence in the air	-
Finland	2 mg/m³	-
Ireland	2 mg/m³	-
7439-92-1 Lead and inorganic compounds (as Pb)		
Austria	0.1 mg/m³ Inhalable aerosol	0.4 mg/m³ Inhalable aerosol
Belgium	0.15 mg/m³	-
Denmark	0.05 mg/m³ Inhalable aerosol	0.10 mg/m³ Inhalable aerosol
European Union	0.15 mg/m³ Inhalable fraction	-
Finland	0.1 mg/m³	-
France	0.1 mg/m³ Inhalable aerosol	-
Germany (AGS)	0.15 mg/m³ Inhalable aerosol	-
Hungary	0.15 mg/m³ Inhalable aerosol; 0.05 mg/m³ Respirable aerosol	0.60 mg/m³ Inhalable aerosol; 0.2 mg/m³ Respirable aerosol
Ireland	0.15 mg/m³	-
Italy	0.15 mg/m³	-
Latvia	0.005 mg/m³	0.01 mg/m³15 minutes average value
Poland	0.05 mg/m³	-
Romania	0.15 mg/m³	
Spain	0.15 mg/m³ Inhalable aerosol	-
Sweden	0.1 mg/m³ Inhalable aerosol; 0.05 mg/m³Respirable aerosol	-
United Kingdom	0.15 mg/m³	-
8050-09-7 Rosin		
Latvia	4 mg/m³	-
Romania	0.1 mg/m³	-
United Kingdom	0.05 mg/m³	0.15 mg/m³

· **DNELs:**

DNEL type		DNEL worker value	DNEL consumer value
7440-31-5 Tin			
Systemic effects	Long-term, inhalation exposure	71 mg/m³	17 mg/m³
	Long-term, dermal exposure	10 mg/kg bw/day	80 mg/kg bw/day
	Long-term, oral exposure	-	5 mg/kg bw/day
8050-09-7 Rosin			
Systemic effects	Long-term, dermal exposure	2.131 mg/kg bw/day	1.065 mg/kg bw/day
	Long-term, oral exposure	-	1.065 mg/kg bw/day

· **PNECs:**

PNEC type	Value
7439-92-1 Lead	
Freshwater	2.4 µg/L
Marine water	3.3 µg/L
Sewage treatment plant (STP)	100 µg/L
Sediment (freshwater)	186 mg/kg sediment dw
Sediment (marine water)	168 mg/kg sediment dw
8050-09-7 Rosin	
Freshwater	1.6 µg/L
Intermittent releases (freshwater)	16 µg/L
Marine water	160 ng/L
Sewage treatment plant (STP)	1 g/L
Sediment (freshwater)	7 µg/kg sediment dw
Sediment (marine water)	700 ng/kg sediment dw

· **Additional information:** The lists valid during the marking were used as basis.

· **8.2 Exposure controls**

· **Based on the composition shown in section 3, the following measures are suggested for occupational safety measure.**

· **Appropriate engineering controls:**

Handle in accordance with good industrial hygiene and safety practice; Wash hands and face before breaks and at the end of work; Take off contaminated clothing and wash it before reuse. See section 7 for information about design of technical facilities.

· **Personal protective equipment**

· **Respiration protection:** Respiration protection is recommended.

· **Protection of hands:**

Protective gloves

Gloves made from butyl rubber Neoprene™ rubber, nitrile rubber (thickness> 0.11mm; breakthrough times up to 480 minutes).

· **Eye protection:**

Safety glasses

Protective goggles with side-shields.

· **Environmental exposure controls:**

Control measures must be made in accordance with Community environmental protection legislation.

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **Appearance:**	
Form	Solid
Color	Gray
Odor	Characteristic
Odor threshold	Not determined
· **pH-value**	Not determined
· **Change in condition**	

Melting point/melting range	Not determined
Boiling point and boiling range	Not determined
· **Freezing point**	Not determined
· **Flash point**	Not applicable
· **Flammability (solid, gas)**	Not flammable solid
· **Decomposition temperature**	Not determined
· **Self-ignition**	Not determined
· **Danger of explosion**	Not determined
· **Explosion limits**	
Lower:	Not determined
Upper:	Not determined
· **Oxidizing properties**	Not determined
· **Vapor pressure**	Not determined
· **Density**	Not determined
· **Relative density**	Not determined
· **Vapor density**	Not determined
· **Evaporation rate**	Not determined
· **Solubility in/Miscibility with**	
Water	Practically insoluble in water
· **Partition coefficient (n-octanol/water)**	Not determined
· **Viscosity**	
Dynamic	Not determined
Kinematic	Not determined
· **9.2 Other information**	Data not available

SECTION 10: Stability and reactivity

· **10.1 Reactivity:** No decomposition if used according to specification.

· **10.2 Chemical stability:** Stable under recommended storage conditions.

· **10.3 Possibility of hazardous reactions:** No known hazardous reaction.

· **10.4 Conditions to avoid:** No special avoid conditions.

· **10.5 Incompatible materials:** Strong acid.

· **10.6 Hazardous decomposition products:** No known hazardous decomposition products.

SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**

· **Acute toxicity:** Based on available data, the classification criteria are not met.

· **LD50/LC50 values relevant for classification:** Data not available

· **Skin corrosion/irritation:** Based on available data, the classification criteria are not met.

· **Serious eyes damage/ irritation:** Based on available data, the classification criteria are not met.

· **Respiratory or skin sensitization:** May cause an allergic skin reaction.

· ***Germ cell mutagenicity:*** *Based on available data, the classification criteria are not met.*

· ***Carcinogenicity:*** *Based on available data, the classification criteria are not met.*

· ***Reproductive toxicity:*** *May damage fertility or the unborn child; May cause harm to breast-fed children.*

· ***STOT-single exposure:*** *Based on available data, the classification criteria are not met.*

· ***STOT-repeated exposure:*** *Causes damage to central nervous system, blood and kidneys through prolonged or repeated exposure by inhalation or ingestion.*

· ***Aspiration hazard:*** *Based on available data, the classification criteria are not met.*

SECTION 12: Ecological information

· ***12.1 Toxicity***

· ***Aquatic toxicity:*** *Not hazardous to the aquatic environment.*

LC50/EC50/NOEC values relevant for classification:	
7440-31-5 Tin	
Long–term toxicity to aquatic invertebrates	*EC50 (7 days) 1.303 mg/L* *LC50 (7 days) 3.2 mg/L*
Toxicity to microorganisms	*EC50 (3 h) 511 mg/L* *NOEC (3 h) 511 mg/L*
8050-09-7 Rosin	
Short–term toxicity to fish	*LC50 (4 days) 1.7 - 5.4 mg/L*
Short–term toxicity to aquatic invertebrates	*LC50 (48 h) 1.6 mg/L*
Toxicity to aquatic algae and cyanobacteria	*EC50 (72 h) 16.6 - 39.6 mg/L* *NOEC (72 h) 6.25 mg/L*
Toxicity to microorganisms	*EC50 (3 h) 10 g/L*

· ***12.2 Persistence and degradability:*** *Data not available.*

· ***12.3 Bio-accumulative potential:*** *Data not available.*

· ***12.4 Mobility in soil:*** *Data not available.*

· ***12.5 Results of PBT and vPvB assessment***

PBT: *Not applicable*

vPvB: *Not applicable*

· ***12.6 Other adverse effects:*** *No known other adverse effects.*

· ***12.7 Additional ecological information***

· ***General notes:*** *Water hazard class 2 (German Regulation) (self-assessment): Hazard to waters.*

Do not allow the product to reach ground water, water course or sewage system.

SECTION 13:Disposal consideration

· ***13.1 Waste treatment methods***

· ***Recommendation:*** *Must not be disposed together with household garbage.*

· ***13.2 Un-cleaned packaging***

· ***Recommendation:*** *Dispose of contents/container in according to the local/regional/national/ international regulation.*

SECTION 14: Transport information

· 14.1 UN-Number	
ADR, RID, ADN, IMDG, IATA	Not regulated as dangerous transport goods, not applicable
· 14.2 UN proper shipping name	
ADR, RID, ADN, IMDG, IATA	Void
· 14.3 Transport hazard class (es)	
ADR, RID, ADN, IMDG, IATA	
Class	Void
Label	Void
· 14.4 Packing group	
ADR, RID, ADN, IMDG, IATA	Void
· 14.5 Marine pollution	No
· 14.6 Special precautions for user	Void
· Danger code (Kemler)	Void
· EMS number	Void
· 14.7 UN "Model Regulation"	Void

SECTION 15: Regulatory information

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

· **MAK (German Maximum Workplace Concentration):**

7439-92-1	Lead	2

· **Directive 2012/18/EU**

· **Named dangerous substances-ANNEX I:** None of the ingredients is listed.

· **Seveso category:** Not applicable

· **Qualifying quantity (tonnes) for the application of lower-tier requirements:** Not applicable

· **Qualifying quantity (tonnes) for the application of upper-tier requirements:** Not applicable

· **National regulations.**

· **Water hazard class:** Water hazard class 2(German Regulation) (self-assessment): Hazard to waters.

· **Other regulations, limitations and prohibitive regulations**

· **SVHC Candidate list of REACH Regulation Annex XIV Authorization:**

7439-92-1	Lead	Toxic for reproduction (Article 57c)

· **REACH Regulation Annex XVII Restriction:**

7439-92-1	Lead	Entry no. 63

· **REACH Regulation Annex XIV Authorization List:** None of the ingredients is listed.

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

SECTION 16: Other information

· **Recommended restriction of use**

REACH Regulation Annex XVII-63

Lead and its compounds (CAS 7439-92-1)

Conditions of restriction:

1. Shall not be placed on the market or used in any individual part of jewellery articles if the concentration of lead (expressed as metal) in such a part is equal to or greater than 0,05 % by weight.

2. For the purposes of paragraph 1:

(i) 'jewellery articles' shall include jewellery and imitation jewellery articles and hair accessories, including:

(a) bracelets, necklaces and rings;

(b) piercing jewellery;

(c) wrist watches and wrist-wear;

(d) brooches and cufflinks;

(ii) 'any individual part' shall include the materials from which the jewellery is made, as well as the individual components of the jewellery articles.

3. Paragraph 1 shall also apply to individual parts when placed on the market or used for jewellery-making.

4. By way of derogation, paragraph 1 shall not apply to:

(a) crystal glass as defined in Annex I (categories 1, 2, 3 and 4) to Council Directive 69/493/EEC (*);

(b) internal components of watch timepieces inaccessible to consumers;

(c) non-synthetic or reconstructed precious and semiprecious stones (CN code 7103, as established by Regulation (EEC) No 2658/87), unless they have been treated with lead or its compounds or mixtures containing these substances;

(d) enamels, defined as vitrifiable mixtures resulting from the fusion, vitrification or sintering of minerals melted at a temperature of at least 500 °C.

5. By way of derogation, paragraph 1 shall not apply to jewellery articles placed on the market for the first time before 9 October 2013 and jewellery articles produced before 10 December 1961.

6. By 9 October 2017, the Commission shall re-evaluate this entry in the light of new scientific information, including the availability of alternatives and the migration of lead from the articles referred to in paragraph 1 and, if appropriate, modify this entry accordingly.

7. Shall not be placed on the market or used in articles supplied to the general public, if the concentration of lead (expressed as metal) in those articles or accessible parts thereof is equal to or greater than 0,05 % by weight, and those articles or accessible parts thereof may, during normal or reasonably foreseeable conditions of use, be placed in the mouth by children.

That limit shall not apply where it can be demonstrated that the rate of lead release from such an article or any such accessible part of an article, whether coated or uncoated, does not exceed 0,05 µg/cm² per hour (equivalent to 0,05 µg/g/h), and, for coated articles, that the coating is sufficient to ensure that this release rate is not exceeded for a period of at least two years of normal or reasonably foreseeable conditions of use of the article.

For the purposes of this paragraph, it is considered that an article or accessible part of an article may be placed in the mouth by children if it is smaller than 5 cm in one dimension or has a detachable or protruding part of that size.

8. By way of derogation, paragraph 7 shall not apply to:

(a) jewellery articles covered by paragraph 1;

(b) crystal glass as defined in Annex I (categories 1, 2, 3 and 4) to Directive 69/493/ EEC;

(c) non-synthetic or reconstructed precious and semi-precious stones (CN code 7103 as established by Regulation (EEC) No 2658/ 87) unless they have been treated with lead or its compounds or mixtures containing these substances;

(d) enamels, defined as vitrifiable mixtures resulting from the fusion, vitrification or sintering of mineral melted at a temperature of at least 500 ° C;

(e) keys and locks, including padlocks;

(f) musical instruments;

(g) articles and parts of articles comprising brass alloys, if the concentration of lead (expressed as metal) in the brass alloy does not exceed 0,5 % by weight;

(h) the tips of writing instruments;

(i) religious articles;

(j) portable zinc-carbon batteries and button cell batteries;

(k) articles within the scope of:

(i) Directive 94/62/EC;

(ii) Regulation (EC) No 1935/2004;

(iii) Directive 2009/48/EC of the European Parliament and of the Council (**);

(iv) Directive 2011/65/EU of the European Parliament and of the Council (***)

9. By 1 July 2019, the Commission shall re-evaluate paragraphs 7 and 8(e), (f), (i) and (j) of this entry in the light of new scientific information, including the availability of alternatives and the migration of lead from the articles referred to in paragraph 7, including the requirement on coating integrity, and, if appropriate, modify this entry accordingly.

10. By way of derogation paragraph 7 shall not apply to articles placed on the market for the first time before 1 June 2016.

Remark: (*) OJ L 326, 29.12.1969, p. 36.

(**) Directive 2009/48/EC of the European Parliament and of the Council of 18 June 2009 on the safety of toys (OJ L 170, 30.6.2009, p. 1).

(***) Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (OJ L 174, 1.7.2011, p. 88).

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Relevant phrases:

H317 May cause an allergic skin reaction

H360FD May damage fertility or the unborn child

H362 May cause harm to breast-fed children

H372 Causes damage to organs through prolonged or repeated exposure

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The contents and format of this SDS are in accordance with Regulation (EC) No 1907/2006, 1272/2008 and Regulation (EU) No 2015/830.

DISCLAIMER OF LIABILITY:

The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

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· Abbreviations and acronyms:

ADR: *Accord européen sur le transport 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.*

CAS: *Chemical Abstracts Service (division of the American Chemical Society)*

DNEL: *Derived No-Effect Level (REACH)*

PNEC: *Predicted No-Effect Concentration (REACH)*

PBT: *Persistent, Bio accumulative and Toxic*

SVHC: *Substance of Very High Concern*

LD50: *Lethal dose, 50 percent*

LC50: *Lethal concentration, 50 percent*

EC50: *Concentration of maximal effect, 50 percent*

NOEC: *No observed effect concentration*

Skin Sens. 1: *Respiratory or skin sensitization, hazard category 1*

Repr. 1A: *Reproductive toxicity, hazard category 1A*

Lact. : *Reproductive toxicity, Additional category for effects on or via lactation*

STOT RE 1: *Specific target organ toxicity after repeated exposure, hazard category 1*

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End of safety data sheet