# METALLEGHE S.r.l.

LEGHE SPECIALI PER L'INDUSTRIA - METALLI ANTIFRIZIONE - LEGHE SALDANTI PRODOTTI PER ELETTRONICA - ANODI E PRODOTTI PER GALVANICA

# TECHNICAL SAFETY DATA SHEET

according to Regulation (EU) 2020/878

Form No. 9310SE

Last modification 20/12/22

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print date 16/03/23

## 1) IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

## 1.1 PRODUCT IDENTIFIER:

CHEMICAL NAME : Rosin Cored Wire in alloy Sn99.3%-Cu0.7% stabilized with Ni

COMMERCIAL NAME: Lega SN99CUNI Filo SE (SE soldering wire in alloy SN99CUNI)

# 1.2 RELEVANT IDENTIFIED USES OF THE MIXTURE AND USES ADVISED AGAINST::

Soft Soldering -Industrial and professional use

#### 1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

OMODEO A&S METALLEGHE Srl

Registered Office: Corso Plebisciti n.1- 20129 Milano-Italy

Customer Care: via Talete N.25 - 20864 Agrate Brianza (MB)-Italy

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E-MAIL: info@omodeo.it

## 1.4 EMERGENCY TELEPHONE NUMBER: List not exhaustive

Italy: +39 02-6610-1029 (Centro Antiveleni Niguarda Ca' Granda - Milano)

England: Emergency 24 hour telephone: +44(0)2071880100

France:  $+33\ 1\ 40\ 05\ 48\ 48$  (Centre Antipoison et de Toxicovigilance de Paris)

Germany: +49 30 19240 (Berliner Betrieb für Zentrale Gesundheitliche Aufgaben)

Belgium: +32 70 245 245 (Centre Anti-Poisons/Antigifcentrum Hôpital Militaire Reine Astrid -Brussells)

Denmark: +45 35 31 55 55 (Poison Information Centre Bispebjerg Hospital-Copenhagen)

Spain: +34 91 562 04 20 (Servicio de Información Toxicológica Instituto Nacional de Toxicología-Departamento de Madrid)

# 2) HAZARDS IDENTIFICATION

#### 2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

# According to Regulation (EC) No1272/2008

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008

#### 2.2 LABEL ELEMENTS

In massive form, do not require labels according to paragraph 1.3.4 Annex I Regulation EC No.1272/2008

# 2.3 OTHER HAZARDS

During the use, an excessive temperature of the iron soldering tip can cause the carbonisation of the rosin, with the consequent formation of aldehydes, irritating for the breathing mucous.

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# 3) COMPOSITION/INFORMATION ON INGREDIENTS

## 3.2 MIXTURES

Component	Registration No. (EC)	CAS No.	EC No.	Index No.	Classification	%	OEL (mg/m3)
TIN (alloy)	01-2119486474-28-***	7440-31-5	231-141-8	n.p.	Not classified	99.3	
COPPER (alloy)	Not requested, according to art. 2 par. 7 d) Reg. EC No.1907/2006	7440-50-8	231-159-6	n.p.	Not classified	0.7	
HYDROGENATED ROSIN mildly activated	01-2119487113-41-***	65997-06-0	266-041-3	n.p.	Not classified	2.3	

Other substances in the mixture are not classified as dangerous, or are present in amount lower than 0.1%.

#### 4) FIRST AID MEASURES

## 4.1 DESCRIPTION OF FIRST AID MEASURES

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance.

- In case of ingestion of powder or fumes, rinse mouth with water. Eventually, administer an emulsion of 20-40 g of activated charcoal in a bit of water.
- In case of inhalation of powder or fumes, move patient to fresh air and consult a doctor.
- In case of contact of powder or fumes with eyes, wash with plenty of water keeping eyelid open, and consult an oculist.
- In case of contact with skin, wash with plenty of water.
- 4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Exposure to fume or dust of tin is known to cause a benign pneumoconiosis (stannosis). Inhalation of metal oxides causes metal fume fever, with flu symptoms.

4.3 Indication of any immediate medical attention and special treatment needed No data available

# 5) FIRE-FIGHTING MEASURES

## 5.1 EXTINGUISHING MEDIA

SUITABLE EXTINGUISHING MEDIA: Water spray, alcohol-resistant foam, dry chemical.

UNSUITABLE EXTINGUISHING MEDIA: Water on melted metals, carbon dioxide or bicarbonate.

- 5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE: Fumes and oxides of metals, carbon oxides, aldehydes.
- 5 3 ADVICE FOR FIREFIGHTERS: Wear self contained breathing apparatus for fire fighting and special protective equipment.

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#### 6) ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Remove material using protective gloves, avoiding direct contact.

6.2 Environmental precautions

Discharge into the environment must be avoided.

6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

The handling and storage of metal doesn't present particular problems.

6.4 REFERENCE TO OTHER SECTIONS

For disposal refer to section 13.

# 7) HANDLING AND STORAGE

- 7.1 PRECAUTIONS FOR SAFE HANDLING: The handling of metal in massive form doesn't present particular problems. Use gloves.
- 7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES: The storage of the metal in massive form doesn't present particular problems. Keep clear from incompatible materials (refer to section 10).
- 7.3 SPECIFIC END USE(S): SU3-PC38; SU22-PC38; PROC25

# 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

# 8.1 CONTROL PARAMETERS

Components with workplace control parameters

No substance with community workplace exposure limit is present.

In every case, check the dispositions of local legislation.

# **DNEL**

Component	Workers –Systemic effects- long term exposure – via Dermal route	Workers – Systemic effects- long term exposure – via Inhalation route	General Population- Systemic effects- long term exposure – via Dermal route	General Population Systemic effects- long term exposure – Inhalation route	TLV/STEL ( EC )	TLV/TWA ( EC )
Tin	133.3 mg/kg bw/day	11.75 mg/m <sup>3</sup>	80 mg/kg bw/day	3.476 mg/m³		
Copper	137 mg/kg bw/day	1 mg/m³	137 mg/kg bw/day	1 mg/m³		
Hydrogenated Rosin	42 mg/kg	147 mg/m <sup>3</sup>	25 mg/kg pc/giorno	44 mg/m3		

# **PNEC**

Component	PNEC STP (EC)	PNEC (EC)	PNEC ( EC) PNEC (EC)		PNEC (EC)	PNEC (EC)
		Sediment (freshwater)	Sediment (marine water)	Soil	Freshwater	Marine Water
Tin						
Copper	230 μg/L	87 mg/kg	676 mg/kg	65 mg/kg	7.8 μg/L	5.2 μg/L
Hydrogenated Rosin	100 mg/l	0.389 mg/kg	0.0389mg/kg	0.075 mg/kg	0.005 mg/l	0.005 mg/l

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#### 8.2 EXPOSURE CONTROLS

# Appropriate engineering controls/ Individual protection measures

Respiratory protection : In presence of melted metal, use high-performance fume cupboard and provide extract ventilation to points where emissions occur. If the respirator is the sole means of protection, use a full-face supplied air respirator. For professional use, provide a good standard of general ventilation and wear a welding fume respirator meeting the requirements of Standard EN149 category FFP2, or better.

Hand/skin protection : Handle with gloves.

Eye / face protection: Use equipment for eye protection, as safety glasses with side-shields conforming to EN166.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

## Environmental exposure controls

Water: No emission to water is predictable, due to morphology of the product.

Air: To reduce emission to air, use wet electrostatic precipitators, bag filters or ceramic and metal mesh filters, wet scrubbers

# 9) PHYSICAL AND CHEMICAL PROPERTIES

Aspect: metallic solid Melting point °C: 227-230

Smell: odourless Boiling point °C: >1800

pH: n.a Flammable point: not flammable

Vapour pressure n.a. Evaporation rate n.a.

Vapour density (mm Hg): n.a. Auto- flammable temperature: n.a.

Relative density (g/cm3): 7.32 Solubility in water: Not soluble

Partition coefficient: n.a. Viscosity n.a.

n-octanol/water

Explosive Properties n.a. Oxidant properties n.a.

Explosive limit (% in air volume ): Lower limit. : n.a.

Upper limit. : n.a.

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## 10) STABILITY AND REACTIVITY

10.1 REACTIVITY: No data available

10.2 CHEMICAL STABILITY: Stable

10.3 Possibility of Hazardous reactions: No data available

10.4 CONDITIONS TO AVOID: Warm, flames, incompatible materials

10.5 INCOMPATIBLE MATERIALS: Do not store near strong acids, bases and oxidizing agents.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS: At elevated temperature, metal fumes and oxides, aldehydes and carbon oxides.

# 11) TOXICOLOGICAL INFORMATION

Acute toxicity: no data available

<u>Irritation</u>: no data available <u>Corrosivity</u>: no data available

Sensitisation: no data available

Repeated dose toxicity: no data available

# **Cancerogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Mutagenicity: no data available

Toxicity for reproduction: no data available

#### Potential health effects

Inhalation: Harmful if inhaled (dust and fumes).

Skin: No data available in metallic form. Nickel present as doping agent may cause allergic skin reactions.

Ingestion: Harmful if ingested (dust and fumes)

Eyes: May cause eye irritation. (dust and fumes)

# Signs and Symptoms of Exposure

Exposure to fume or dust of tin is known to cause a benign pneumoconiosis (stannosis). Inhalation of metal oxides causes metal fume fever, with flu symptoms.

## 12) ECOLOGICAL INFORMATION

12.1 Toxicity: no data available

12.2 Persistence and degradability: no data available

12.3 Bioaccumulative potential: no data available

12.4 Mobility in soil: no data available

12.5 Results of PBT and vPvB assessment: no data available

## 13) DISPOSAL CONSIDERATIONS

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## 13.1 WASTE TREATMENT METHODS

The residues of the material in object must be classified as waste, nevertheless if in metallic shape, they can be treated with facilitated norms for recoverable materials

#### 14) TRANSPORT INFORMATION

14.1 UN NUMBER

ADR/RID: - IMDG: - IATA: -

14.2 UN PROPER SHIPPING NAME

ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods

14.3 TRANSPORT HAZARD CLASS(ES)

ADR/RID: - IMDG: - IATA: -

14.4 PACKAGING GROUP

ADR/RID: - IMDG: - IATA: -

14.5 ENVIRONMENTAL HAZARDS

ADR/RID: no IMDG Marine pollutant: no IATA: no

14.6 SPECIAL PRECAUTIONS FOR USER

no data available

#### 15) REGULATORY INFORMATION

- 15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE
- -Product compliance to Directive 2011/65/EC(RoHS) and to Directive 2000/53/EC (End life vehicles)
- Regulation EC No.1907/2006 Annex XVII "Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles" point 27 "Nickel and its compounds"
- 15.2 CHEMICAL SAFETY ASSESSMENT

no data available

# 16) OTHER INFORMATION

# Revision Index/ Changes Indications

This document replaces the version of 26/10/11. Modifications regard paragraphs 2.1, 3, 7.3, 8 and 15.1.

The information contained in this form must be considered as a description of the product characteristics for safety aims, and shouldn't be considered a warrant of the product's properties.