

# Lead Free Solder Wire

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
Issue date: 1/27/2022 Revision date: 1/27/2022 Version: 1.0

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

#### 1.1. Product identifier

Product form : Mixture  
Trade name : Lead Free Solder Wire  
UFI : No information available

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

##### 1.2.1. Relevant identified uses

Use of the substance/mixture : Soldering.

##### 1.2.2. Uses advised against

Restrictions on use : No information available

#### 1.3. Details of the supplier of the safety data sheet

##### Supplier

Kopen Electrical Co., Ltd  
2/F., Flat G-H Winner Factory Building, 55 Hung To Road, Kwun Tong,  
Kowloon, Hong Kong.  
T 852-2342 4281 - F 852-2343 2850  
Email: [info@kopen.com](mailto:info@kopen.com)

##### Importer

#### 1.4. Emergency telephone number

Emergency number : +852-2342 4281

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Serious eye damage/eye irritation, Category 2 H319

Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation H335

Full text of H- and EUH-statements: see section 16

##### Adverse physicochemical, human health and environmental effects

May cause respiratory irritation. Causes serious eye irritation.

#### 2.2. Label elements

##### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS07

Signal word (CLP) : Warning  
Hazard statements (CLP) : H319 - Causes serious eye irritation.  
H335 - May cause respiratory irritation.  
Precautionary statements (CLP) : P271 - Use only outdoors or in a well-ventilated area.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337+P313 - If eye irritation persists: Get medical advice/attention.

# Lead Free Solder Wire

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

P405 - Store locked up.  
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

EUH-statements : None.

### 2.3. Other hazards

Other hazards which do not result in classification : No information available.

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII  
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII  
Contains no PBT/vPvB substances  $\geq 0.1\%$  assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable.

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Tin	CAS-No.: 7440-31-5 EC-No.: 231-141-8	97.761	Eye Irrit. 2; H319 STOT SE 3; H335
Copper	CAS-No.: 7440-50-8 EC-No.: 231-159-6 EC Index-No.: 029-024-00-X	0.739	Not classified
Modified rosin	-	1.5	Not classified

Full text of H- and EUH-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general : Remove contaminated clothing and shoes.  
First-aid measures after inhalation : IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.  
First-aid measures after skin contact : Wash off with soap and plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.  
First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.  
First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Get medical advice/attention.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects : Causes serious eye irritation. May cause respiratory irritation.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

# Lead Free Solder Wire

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.  
Unsuitable extinguishing media : No information available.

#### 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

#### 5.3. Advice for firefighters

Firefighting instructions : Approach from upwind. Breathing apparatus. Cool down the containers exposed to heat with a water spray. Do not allow run-off from fire-fighting to enter drains or water courses. Eliminate all ignition sources if safe to do so. Wear personal protective equipment.  
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

##### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

#### 6.2. Environmental precautions

Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Do not allow into any sewer, on the ground or into any body of water.

#### 6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.  
Methods for cleaning up : Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).  
Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes. Wear personal protective equipment.  
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Air and moisture sensitive. Handle and store under inert gas.  
Storage class (TRGS 510): Non Combustible Solids

# Lead Free Solder Wire

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 7.3. Specific end use(s)

SDS section 1.2.1 - Additional text.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 8.1.1 National occupational exposure and biological limit values

Tin (7440-31-5)	
<b>EU - Indicative Occupational Exposure Limit (IOEL)</b>	
Local name	Tin (inorganic compounds as Sn)
IOEL TWA	2 mg/m <sup>3</sup>
Regulatory reference	COMMISSION DIRECTIVE 91/322/EEC
<b>Austria - Occupational Exposure Limits</b>	
MAK (OEL TWA)	2 mg/m <sup>3</sup> (inhalable fraction)
MAK (OEL STEL)	4 mg/m <sup>3</sup> (inhalable fraction)
<b>Belgium - Occupational Exposure Limits</b>	
OEL TWA	2 mg/m <sup>3</sup>
OEL chemical category	Skin
<b>Bulgaria - Occupational Exposure Limits</b>	
OEL TWA	0.1 mg/m <sup>3</sup> (applies to its organic compounds) 2 mg/m <sup>3</sup> (applies to its inorganic compounds)
<b>Croatia - Occupational Exposure Limits</b>	
GVI (OEL TWA) [1]	2 mg/m <sup>3</sup>
<b>Cyprus - Occupational Exposure Limits</b>	
OEL TWA	2 mg/m <sup>3</sup>
<b>Finland - Occupational Exposure Limits</b>	
HTP (OEL TWA) [1]	2 mg/m <sup>3</sup>
<b>Greece - Occupational Exposure Limits</b>	
OEL TWA	2 mg/m <sup>3</sup>
<b>Ireland - Occupational Exposure Limits</b>	
OEL TWA [1]	2 mg/m <sup>3</sup>
OEL STEL	6 mg/m <sup>3</sup> (calculated)
<b>Malta - Occupational Exposure Limits</b>	
OEL TWA	2 mg/m <sup>3</sup>
<b>Poland - Occupational Exposure Limits</b>	
NDS (OEL TWA)	2 mg/m <sup>3</sup> (inhalable fraction)
<b>Portugal - Occupational Exposure Limits</b>	
OEL TWA	2 mg/m <sup>3</sup>
<b>Slovakia - Occupational Exposure Limits</b>	
OEL chemical category	Potential for cutaneous absorption

# Lead Free Solder Wire

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Tin (7440-31-5)	
<b>Slovenia - Occupational Exposure Limits</b>	
OEL TWA	2 mg/m <sup>3</sup> (applies to Tin(IV) inorganic compounds-inhalable fraction) 8 mg/m <sup>3</sup> (applies to Tin(II) inorganic compounds-inhalable fraction)
<b>Spain - Occupational Exposure Limits</b>	
VLA-ED (OEL TWA) [1]	2 mg/m <sup>3</sup>
<b>Sweden - Occupational Exposure Limits</b>	
NGV (OEL TWA)	2 mg/m <sup>3</sup> (inhalable fraction)
<b>Switzerland - Occupational Exposure Limits</b>	
KZGW (OEL STEL)	0.02 mg/m <sup>3</sup> (inhalable dust (Tetra-n-butyltin compounds))
KZGW (OEL STEL) [ppm]	0.004 ppm (Tetra-n-butyltin compounds)
OEL chemical category	Skin notation
<b>USA - ACGIH - Occupational Exposure Limits</b>	
ACGIH OEL TWA	2 mg/m <sup>3</sup> (inhalable particulate matter)
Copper (7440-50-8)	
<b>EU - Indicative Occupational Exposure Limit (IOEL)</b>	
Local name	Copper
IOEL TWA	0.01 mg/m <sup>3</sup> (respirable fraction)
Remark	(Year of adoption 2014)
Regulatory reference	SCOEL Recommendations
<b>Austria - Occupational Exposure Limits</b>	
MAK (OEL TWA)	1 mg/m <sup>3</sup> (inhalable fraction) 0.1 mg/m <sup>3</sup> (respirable fraction, smoke)
MAK (OEL STEL)	4 mg/m <sup>3</sup> (inhalable fraction) 0.4 mg/m <sup>3</sup> (respirable fraction, smoke)
<b>Belgium - Occupational Exposure Limits</b>	
OEL TWA	0.2 mg/m <sup>3</sup> (fume) 1 mg/m <sup>3</sup> (dust and mist)
<b>Bulgaria - Occupational Exposure Limits</b>	
OEL TWA	0.1 mg/m <sup>3</sup> (metal vapor)
<b>Croatia - Occupational Exposure Limits</b>	
GVI (OEL TWA) [1]	0.2 mg/m <sup>3</sup> (fume) 1 mg/m <sup>3</sup> (dust)
KGVI (OEL STEL)	2 mg/m <sup>3</sup> (dust)
<b>Czech Republic - Occupational Exposure Limits</b>	
PEL (OEL TWA)	1 mg/m <sup>3</sup> (dust) 0.1 mg/m <sup>3</sup> (fume)
<b>Denmark - Occupational Exposure Limits</b>	
OEL TWA [1]	1 mg/m <sup>3</sup> (dust and powder) 0.1 mg/m <sup>3</sup> (fume)
<b>Estonia - Occupational Exposure Limits</b>	
OEL TWA	1 mg/m <sup>3</sup> (total dust) 0.2 mg/m <sup>3</sup> (respirable dust)

# Lead Free Solder Wire

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

<b>Copper (7440-50-8)</b>	
<b>Finland - Occupational Exposure Limits</b>	
HTP (OEL TWA) [1]	0.02 mg/m <sup>3</sup> (respirable dust)
<b>France - Occupational Exposure Limits</b>	
VME (OEL TWA)	0.2 mg/m <sup>3</sup> (fume) 1 mg/m <sup>3</sup> (dust)
VLE (OEL C/STEL)	2 mg/m <sup>3</sup> (dust)
<b>Greece - Occupational Exposure Limits</b>	
OEL TWA	0.2 mg/m <sup>3</sup> (fume) 1 mg/m <sup>3</sup> (dust)
OEL STEL	2 mg/m <sup>3</sup> (dust)
<b>Hungary - Occupational Exposure Limits</b>	
AK (OEL TWA)	0.1 mg/m <sup>3</sup> 0.01 mg/m <sup>3</sup> (fume)
CK (OEL STEL)	0.2 mg/m <sup>3</sup>
<b>Ireland - Occupational Exposure Limits</b>	
OEL TWA [1]	0.2 mg/m <sup>3</sup> (fume) 1 mg/m <sup>3</sup> (dusts and mists)
OEL STEL	2 mg/m <sup>3</sup> (dusts and mists) 0.6 mg/m <sup>3</sup> (calculated-fume)
<b>Latvia - Occupational Exposure Limits</b>	
OEL TWA	0.5 mg/m <sup>3</sup>
<b>Lithuania - Occupational Exposure Limits</b>	
IPRV (OEL TWA)	1 mg/m <sup>3</sup> (inhalable fraction) 0.2 mg/m <sup>3</sup> (respirable fraction)
<b>Netherlands - Occupational Exposure Limits</b>	
TGG-8u (OEL TWA)	0.1 mg/m <sup>3</sup> (inhalable dust)
<b>Poland - Occupational Exposure Limits</b>	
NDS (OEL TWA)	0.2 mg/m <sup>3</sup>
<b>Portugal - Occupational Exposure Limits</b>	
OEL TWA	0.2 mg/m <sup>3</sup> (fume) 1 mg/m <sup>3</sup> (dust and mist)
<b>Romania - Occupational Exposure Limits</b>	
OEL TWA	0.5 mg/m <sup>3</sup> (dust)
OEL STEL	0.2 mg/m <sup>3</sup> (fume) 1.5 mg/m <sup>3</sup> (dust)
<b>Slovakia - Occupational Exposure Limits</b>	
NPHV (OEL TWA) [1]	1 mg/m <sup>3</sup> (inhalable fraction) 0.2 mg/m <sup>3</sup> (respirable fraction)
<b>Spain - Occupational Exposure Limits</b>	
VLA-ED (OEL TWA) [1]	0.1 mg/m <sup>3</sup> (see UNE EN 481:1995 on workplace atmospheres-respirable fraction)
<b>Sweden - Occupational Exposure Limits</b>	
NGV (OEL TWA)	0.01 mg/m <sup>3</sup> (respirable fraction)

# Lead Free Solder Wire

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Copper (7440-50-8)	
<b>United Kingdom - Occupational Exposure Limits</b>	
WEL TWA (OEL TWA) [1]	1 mg/m <sup>3</sup> (dust and mists) 0.2 mg/m <sup>3</sup> (fume)
WEL STEL (OEL STEL)	0.6 mg/m <sup>3</sup> (calculated-fume) 2 mg/m <sup>3</sup> (dust and mist)
<b>Norway - Occupational Exposure Limits</b>	
Grenseverdi (OEL TWA) [1]	0.1 mg/m <sup>3</sup> (fume) 1 mg/m <sup>3</sup> (dust)
Korttidsverdi (OEL STEL)	3 mg/m <sup>3</sup> (value calculated-dust) 0.3 mg/m <sup>3</sup> (value calculated-fume)
<b>Switzerland - Occupational Exposure Limits</b>	
MAK (OEL TWA) [1]	0.1 mg/m <sup>3</sup> (inhalable dust)
KZGW (OEL STEL)	0.2 mg/m <sup>3</sup> (inhalable dust)
<b>USA - ACGIH - Occupational Exposure Limits</b>	
ACGIH OEL TWA	0.2 mg/m <sup>3</sup> (fume)

### 8.1.2. Recommended monitoring procedures

No additional information available

### 8.1.3. Air contaminants formed

No additional information available

### 8.1.4. DNEL and PNEC

No additional information available

### 8.1.5. Control banding

No additional information available

## 8.2. Exposure controls

### 8.2.1. Appropriate engineering controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

### 8.2.2. Personal protection equipment

#### 8.2.2.1. Eye and face protection

##### Eye protection:

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### 8.2.2.2. Skin protection

##### Skin and body protection:

Wear suitable protective clothing

##### Hand protection:

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### 8.2.2.3. Respiratory protection

##### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

# Lead Free Solder Wire

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 8.2.2.4. Thermal hazards

**Thermal hazard protection:**

No information available.

### 8.2.3. Environmental exposure controls

**Environmental exposure controls:**

Avoid release to the environment.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: Silvery
Appearance	: Silvery solid
Odour	: Odourless.
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: Not applicable.
Boiling point	: Not available
Flammability	: Non flammable.
Explosive properties	: Not explosive.
Oxidising properties	: No data available.
Explosive limits	: Not applicable.
Lower explosion limit	: Not applicable.
Upper explosion limit	: Not applicable.
Flash point	: Not applicable.
Auto-ignition temperature	: Not applicable.
Decomposition temperature	: Not available
pH	: Not available
pH solution	: Not available
Viscosity, kinematic	: Not applicable.
Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50 °C	: Not available
Density	: Not available
Relative density	: Not available
Relative vapour density at 20 °C	: Not applicable.
Particle size	: Not available
Particle size distribution	: Not available
Particle shape	: Not available
Particle aspect ratio	: Not available
Particle aggregation state	: Not available
Particle agglomeration state	: Not available
Particle specific surface area	: Not available
Particle dustiness	: Not available

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

No additional information available

#### 9.2.2. Other safety characteristics

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.



# Lead Free Solder Wire

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Heat.

### 10.5. Incompatible materials

Strong oxidizing agents, Chlorine, permanganates, e.g. potassium permanganate.

### 10.6. Hazardous decomposition products

Carbon monoxide, Carbon dioxide (CO<sub>2</sub>), Titanium/titanium oxides

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified  
Acute toxicity (dermal) : Not classified  
Acute toxicity (inhalation) : Not classified

#### Tin (7440-31-5)

LD50 oral rat	700 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 Inhalation - Rat	> 4.75 mg/l/4h

#### Copper (7440-50-8)

LC50 Inhalation - Rat	> 5.11 mg/l/4h
-----------------------	----------------

Skin corrosion/irritation : Not classified  
Serious eye damage/irritation : Causes serious eye irritation.  
Respiratory or skin sensitisation : Not classified  
Germ cell mutagenicity : Not classified  
Carcinogenicity : Not classified  
Reproductive toxicity : Not classified  
STOT-single exposure : May cause respiratory irritation.  
STOT-repeated exposure : Not classified  
Aspiration hazard : Not classified

### 11.2. Information on other hazards

#### 11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties : The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

#### 11.2.2. Other information

Other information : No information available

# Lead Free Solder Wire

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

#### 12.2. Persistence and degradability

No additional information available

#### 12.3. Bioaccumulative potential

No additional information available

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Results of PBT and vPvB assessment

##### Lead Free Solder Wire

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

#### 12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

#### 12.7. Other adverse effects

Other adverse effects : No information available

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Contaminated packaging : Dispose of contents/container in accordance with licensed collector's sorting instructions.

### SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number or ID number</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.2. UN proper shipping name</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.3. Transport hazard class(es)</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated

# Lead Free Solder Wire

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

ADR	IMDG	IATA	ADN	RID
<b>14.4. Packing group</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.5. Environmental hazards</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

### 14.6. Special precautions for user

#### Overland transport

Not regulated

#### Transport by sea

Not regulated

#### Air transport

Not regulated

#### Inland waterway transport

Not regulated

#### Rail transport

Not regulated

### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable.

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Contains no substance subject to Regulation (EC) 273/2004 of the European Parliament and of the Council of 11 February 2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances.

#### 15.1.2. National regulations

##### Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

SZW-lijst van mutagene stoffen : None of the components are listed

SZW-lijst van reprotoxische stoffen – Borstvoeding : None of the components are listed

SZW-lijst van reprotoxische stoffen –

Vruchtbaarheid

SZW-lijst van reprotoxische stoffen – Ontwikkeling : None of the components are listed

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

# Lead Free Solder Wire

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### SECTION 16: Other information

#### Indication of changes:

Not applicable.

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

# Lead Free Solder Wire

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

---

Version : 1.0  
Issue date : 1/27/2022  
Revision date : 1/27/2022  
Data sources : LOLI. ECHA reference.  
Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging.  
Other information : No information available.

Full text of H- and EUH-statements:	
	None
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.