Safety data sheet
according to UK REACH

Printing date 02.12.2024 Version number 1.01 (replaces version 1.00) Revision: 15.11.2024

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

· **1.1 Product identifier**

· **Trade name: 4900-4917**

· **Other Means of Identification:** SAC305 No Clean Solder Wire

· **Related Part Number:**
4900-35G, 4900-112G, 4900-227G, 4900-454G, 4912-227G, 4915-112G, 4915-454G, 4916-112G, 4916-454G, 4917-227G

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

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

· **Uses advised against**
Do not use brazing soldering methods such as high temperature torch soldering/torch welding.

· **1.3 Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

MG Chemicals Ltd. (Head Office)
1210 Corporate Drive
Burlington, Ontario L7L 5R6
CANADA
+(1) 905-331-1396
info@mgchemicals.com

MG Chemicals
Heame House, 23 Bliston Street
Sedgely Dudley DY3 1JA.
United Kingdom
+(44) 1663 362888

MG Chemicalst Ltd.
Level 2, Vision Exchange, Building Territorials Street,
Zone 1, Central Business, District,
Birkirkara CBD 1070,
MALTA

· **Further information obtainable from:** sds@mgchemicals.com

· **1.4 Emergency telephone number:**

Verisk 3E (Access code: 335388)
+(44) 20 3514787
+(1) 760 476 3961
UK Toll free: +(0) 800 680 0425

Members of the public seeking specific information on poisons should contact:
In England and Wales: NHS 111 - dial 111
In Scotland: NHS 24 - dial 111

*

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**
The product is not classified, according to the GB CLP regulation.

· **2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008** Not applicable

(Contd. on page 2)

(Contd. of page 1)

· **Hazard pictograms** Not applicable
· **Signal word** Not applicable
· **Hazard statements** Not applicable

· **2.3 Other hazards**
Rosin-based flux fumes may irritate the nose, throat and lungs. After prolonged/repeated exposure, it may elicit an allergic reaction (asthma).
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **Determination of endocrine-disrupting properties** Endocrine Disruptor substance ≥ 0.1% = none

*
SECTION 3: Composition/information on ingredients

· **3.2 Mixtures**
· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**		
CAS: 7440-31-5 EINECS: 231-141-8	tin	94.0%
CAS: 7440-22-4 EINECS: 231-131-3	silver substance with a Community workplace exposure limit	3.0%
CAS: 65997-06-0 EINECS: 266-041-3	Rosin, hydrogenated	2.2%
CAS: 7440-50-8 EINECS: 231-159-6 Index number: 029-024-00-X	copper Aquatic Chronic 2, H411	0.5%

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

· **4.1 Description of first aid measures**
· **General information:** No special measures required.
· **After inhalation:** Supply fresh air; consult doctor in case of complaints.
· **After skin contact:**
Generally the product does not irritate the skin.
Wash with plenty of water or shower.
Take off contaminated clothing and wash it before reuse.
· **After eye contact:**
Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If symptoms persist consult doctor.
· **After swallowing:**
Rinse mouth.
If symptoms persist consult doctor.

· **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.

(Contd. on page 3)

(Contd. of page 2)

· **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**
· **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.

· **5.2 Special hazards arising from the substance or mixture**
Not flammable or combustible, but burns if involved in a fire. Produces irritating smoke of unknown toxicity in fires.
Prevent fire-fighting wash from entering waterway or sewer system.
· **Hazardous combustion products:**
Carbon Oxides (COx)
Tin oxides (SnOx)
toxic metal fumes

· **5.3 Advice for firefighters**
· **Protective equipment:** Wear self-contained breathing apparatus and full fire-fighting turn-out gear.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**
Avoid breathing the fumes or vapors.
Remove or keep away all sources of extreme heat or open flames.

· **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

· **6.3 Methods and material for containment and cleaning up:**
Not readily flowable.
Collect in a sealable, chemical-resistant container.
Wipe the residues with a paper towel and place dirty towels in container.
Use soap and water to remove the last traces of residue.

· **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**
Keep out of reach of children.
Avoid breathing fumes.
No special measures required.
Wear protective gloves, protective clothing, and eye protection.
· **Information about fire - and explosion protection:** No special measures required.

(Contd. on page 4)

(Contd. of page 3)

· **7.2 Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:**
Keep in a dry and clean area, away from incompatible substances
· **Information about storage in one common storage facility:** Not required.
· **Further information about storage conditions:** None.

· **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:**	
7440-22-4 silver	
WEL	Long-term value: 0.1 mg/m³

· **Additional information:**
The lists valid during the making were used as basis.
Refer to the national or regional occupational exposure limit regulation for abbreviations and acronyms.

· **8.2 Exposure controls**
· **Appropriate engineering controls**
Soft soldering temperatures (<450 °C) are generally too low to generate significant amounts of metal vapors; however, metal oxide fumes and dust, or flux decomposition fumes can occur.
RECOMMENDATION: For frequent or prolonged soldering processes, use of a local exhaust system to avoid exposure to thermal decomposition products. For example, use fume cabinet, a hood on a flexible arm, or tip-mounted fume extraction system on the soldering iron.
· **Individual protection measures, such as personal protective equipment**
· **General protective and hygienic measures:**
The usual precautionary measures are to be adhered to when handling chemicals.
· **Respiratory protection:**
If the product is heated or worker has a known allergic reaction, consider using a full mask with organic vapor cartridge or with an independent air supply.
· **Hand protection**
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.



Protective gloves: EN374

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
· **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
· **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

(Contd. on page 5)

(Contd. of page 4)

· **Eye/face protection** Goggles recommended during refilling

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**	
· **Physical state**	Solid
· **Form:**	Wire
· **Colour:**	Silver grey
· **Odour:**	Odourless
· **Odour threshold:**	Not determined.
· **Melting point/freezing point:**	217–221 °C
· **Boiling point or initial boiling point and boiling range**	Undetermined.
· **Flammability**	Non flammable
· **Lower and upper explosion limit**	
· **Lower:**	Not applicable
· **Upper:**	Not applicable
· **Flash point:**	Not applicable.
· **Decomposition temperature:**	Not determined.
· **pH**	Not determined.
· **Viscosity:**	
· **Kinematic viscosity**	Not determined. Not applicable.
· **Dynamic:**	Not determined.
· **Solubility**	
· **water:**	Insoluble.
· **Partition coefficient n-octanol/water (log value)**	Not determined.
· **Vapour pressure:**	Not determined.
· **Density at 20 °C:**	6.5 g/cm³
· **Relative density at 25 °C:**	6.5
· **Vapour density (air=1):**	Not determined.
· **Particle characteristics**	See section 3.

· **9.2 Other information**	
· **9.2.1 Information with regard to physical hazard classes**	Not applicable
· **9.2.2 Other safety characteristics**	
· **Evaporation rate**	Not determined.
· **Ignition temperature:**	Product is not selfigniting.
· **Explosive properties:**	Product does not present an explosion hazard.
· **Solvent content:**	
· **Organic solvents:**	Not available
· **VOC (EC)**	0.00 %
· **Solids content:**	100.0 %

SECTION 10: Stability and reactivity

· **10.1 Reactivity** Tin may react violently in presence of disulfur dichloride and iodine bromide.

(Contd. on page 6)

(Contd. of page 5)

· **10.2 Chemical stability** Chemically stable at normal temperatures and pressures.
· **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.

· **10.3 Possibility of hazardous reactions** No dangerous reactions known.

· **10.4 Conditions to avoid** Extreme temperatures above 450 °C [842 °F], such as those due to welding.

· **10.5 Incompatible materials:**
Oxidizing agents
Strong acids

· **10.6 Hazardous decomposition products:**
Hazardous combustion products: see section 5.
Thermal degradation produces oxidized rosin by-products that are known skin and respiratory sensitizers.

SECTION 11: Toxicological information

· **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
· **Acute toxicity** Based on available data, the classification criteria are not met.
· **Primary irritant effect:**
· **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
· **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
· **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
· **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** Based on available data, the classification criteria are not met.
· **STOT-single exposure** Based on available data, the classification criteria are not met.
· **STOT-repeated exposure** Based on available data, the classification criteria are not met.
· **Aspiration hazard** Based on available data, the classification criteria are not met.
· **Summary of Effects and Symptoms by Routes of Exposure**
· **Eyes:**
may cause mild irritation
redness
· **Skin:** redness, may cause mild irritation
· **Inhalation:**
cough
irritation of the respiratory tract
overexposure to dust or metal fumes may lead to pneumoconiosis or stanosis
· **Swallowed:** none known or expected
· **Additional toxicological information:**
· **Delayed and immediate effects as well as chronic effects from short and long-term exposure**
No further relevant informtion available.

· **11.2 Information on other hazards**

· **Endocrine disrupting properties**
None of the ingredients is listed.

(Contd. on page 7)

(Contd. of page 6)

SECTION 12: Ecological information

· **12.1 Toxicity**
· **Aquatic toxicity:**
Based on transformation/dissolution data published by ECHA registrants, the classification threshold is not met for massive silver.

· **12.2 Persistence and degradability** No further relevant information available.

· **12.3 Bioaccumulative potential** No further relevant information available.

· **12.4 Mobility in soil** No further relevant information available.

· **12.5 Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

· **12.6 Endocrine disrupting properties**
The product does not contain substances with endocrine disrupting properties.

· **12.7 Other adverse effects**
· **Additional ecological information:**
· **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**
· **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
Smaller quantities can be disposed of with household waste.

· **Uncleaned packaging:**
· **Recommendation:**
Containers may still present a chemical hazard/ danger when empty.
Dispose of contents in accordance with all local, regional, national, and international regulations.
Where possible retain label warnings and SDS and observe all notices pertaining to the product.

SECTION 14: Transport information

· **14.1 UN number or ID number**	
· **ADR, IMDG, IATA**	Not regulated
· **14.2 UN proper shipping name**	
· **ADR**	Not regulated
· **14.3 Transport hazard class(es)**	
· **ADR, IMDG, IATA**	
· **Class**	-No
· **Label**	-No

(Contd. on page 8)

(Contd. of page 7)

· **14.4 Packing group**	
· **ADR, IMDG, IATA**	Not applicable
· **14.5 Environmental hazards:**	Not applicable.
· **14.6 Special precautions for user**	Not applicable.
· **14.7 Maritime transport in bulk according to IMO instruments**	Not applicable.
· **UN "Model Regulation":**	Not regulated

SECTION 15: Regulatory information

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

· **Poisons Act**

· **Regulated explosives precursors (Part 1)**

None of the ingredients is listed.

· **Regulated poisons (Part 2)**

None of the ingredients is listed.

· **Reportable explosives precursors (Part 3)**

None of the ingredients is listed.

· **Reportable poisons (Part 4)**

None of the ingredients is listed.

· **Directive 2012/18/EU**

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

· **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

None of the ingredients is listed.

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

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**
H411 Toxic to aquatic life with long lasting effects.

· **Department issuing SDS:** Regulatory department
· **Contact:** sds@mgchemicals.com
· **Date of previous version:** 20.06.2024
· **Version number of previous version:** 1.00
· **Abbreviations and acronyms:**
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods

(Contd. on page 9)

(Contd. of page 8)

IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

· *** Data compared to the previous version altered.**