

MATERIAL SAFETY DATA SHEET

ARGENTIUM SILVER SOLDERS



Dated: 01 May 2020

1. IDENTIFICATION OF THE PRODUCT AND THE COMPANY

Trade name: Argentium Silver Solders

Product type and use: Non ferrous alloys for jewellery manufacturing industry.

Company: Argentium International Limited
3-5 Dunn Street
London E8 2DG, UK
Email: info@argentiumsilver.com
Tel: +44 (0)845 209 7097

Emergency telephone number of the company and/or of an authorised advisory centre:

Tel: +44 (0)845 209 7097

2. HAZARDS IDENTIFICATION

In its manufactured and shipped state, this product is considered to present low hazard. Elevated temperatures above the melting point, or mechanical action, may form dust and fumes which may be irritating to eyes, mucous membranes and respiratory tract.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous components within the meaning of EEC directive 67/548 and corresponding classification: None.

4. FIRST AID MEASURES

Contact with skin: Wash with plenty of water and soap.

Contact with eyes: Wash immediately with water for at least 10 minutes.

Swallowing: Induce vomiting. SEEK A MEDICAL EXAMINATION IMMEDIATELY and present the safety data sheet. A suspension of activated charcoal in water, or liquid paraffin may be administered.

Inhalation: Ventilate the premises. The patient is to be removed immediately from the contaminated premises and made to rest in a well ventilated area. Should the patient feel unwell, OBTAIN MEDICAL ATTENTION.

5. FIRE-FIGHTING MEASURES

Recommended extinguishers: Water, CO₂, Foam, Chemical powders (according to the materials involved in the fire). Avoid water on high temperature metals (risk of explosion).

Extinguishers not to be used: None in particular.

Risks arising from combustion: Avoid inhaling fumes.

Protective equipment: Use protection for respiratory tract.

6. ACCIDENTAL RELEASE MEASURES

Measures for personal safety:	Use gloves and protective clothing.
Environmental measures:	Limit leakages with earth or sand. If the product has escaped into a water course, into the drainage system, or has contaminated the ground or vegetation, notify the competent authorities.
Cleaning methods:	If the product is in a liquid form, stop it from entering the drainage system. Recover the product for re-use if possible, or for elimination. The product might, where appropriate, be absorbed by inert material. After the product has been recovered, rinse the area and materials involved with water.

7. HANDLING AND STORAGE

Handling precautions:	Avoid contact and inhalation of the vapours. Also see paragraph 8 below. Do not eat or drink while working.
Incompatible materials:	None in particular.
Storage conditions:	Instructions as regards storage premises. Adequately ventilated premises.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Precautionary measures:	Give adequate ventilation to the work space where the product is stored and/or handled.
Respiratory protection:	Not needed for normal use.
Protection for hands:	Protect from heat appropriate for the soldering process used.
Eye protection:	Shield and filter as appropriate for the soldering process used.
Protection for skin:	Protect appropriately for the soldering process used.
Exposure limit(s) (ACGIH):	None.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and colour:	White-grey wire or sheet.		
Odour:	Odourless.		
pH:	N.A.		
Easy Solder melting range:	683°C - 722°C / 1261°F - 1331°F		
Medium-Hard Solder melting range:	725°C - 751°C / 1337°F - 1383°F		
Extra-Hard Solder melting range:	753°C - 765°C / 1387°F - 1409°F		
Vapour pressure:	N.D.		
Relative density:	9.0 g/cm ³		
Solubility in water:	Insoluble in water.		
Lipid solubility:	Insoluble in organic solvents.		
Partition c. (n-octanol/H ₂ O):	N.A.		
Vapour density:	N.A.		
Boiling point:	N.D.		
Flash point:	N.A.		
Solid/gas flammability:	N.A.	Autoignition temperature:	N.A.
Explosive properties:	N.A.	Oxidising properties:	N.A.

10. STABILITY AND REACTIVITY

Conditions to avoid:	Stable under normal conditions.
Substances to avoid:	Reacts with strong mineral acids, leading to complete solubilisation and flammable gas generation (hydrogen).
Hazardous decomposition products:	None.

11. TOXICOLOGICAL INFORMATION

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

Toxicological information on main components of the mixture: **Argentium Silver Solders**

No specific risks can be referred to the solid state. Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately. Fumes or fine dusts may cause irritation to the respiratory system, cough, headache, nausea, fever and cause sensitisation by inhalation and skin contact.

Silver:	MAK: 0.1mg/m ³
Copper:	TLV-TWA: 0.2mg/m ³
Germanium:	MAK: 0.1mg/m ³
Zinc:	TLV: 5.0mg/m ³ as ZnO

12. ECOLOGICAL INFORMATION

Adopt good working practices, so that the product is not released into the environment.

13. DISPOSAL CONSIDERATIONS

Recover if possible. In so doing, comply with the local and national regulations currently in force.

14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.
ADR-UN number: Not dangerous.

15. REGULATORY INFORMATION

Council Directive 67/548/EEC (Classification, packaging and labelling of dangerous substances) and subsequent amendments. Council Directive 1999/45/EC (Classification, packaging and labelling of dangerous preparations) and subsequent amendments. Commission Directive 98/24/EC (Protection of the health and safety of workers from the risk related to chemical agent). Commission Directive 2000/39/EC (Occupational exposure limit values). Regulation (EC) No 1907/2006 (REACH). Regulation (EC) No 1272/2008 (CLP) (Annex V1). Regulation (EC) No 790/2009 (Annex 1V, Annex V).

Special provisions: For professional use only.

Where applicable, refer to the following regulatory provisions:
Directive 82/501/EEC ('Activities linked to risks of serious accidents') and subsequent amendments.
Regulation (EC) nr 648/2004 (detergents).

16. OTHER INFORMATION

Main bibliographic sources: ECDIN - Environmental Chemicals Data and Information Network -
Joint Research Centre, Commission of the European Communities
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS -
Eight Edition - Van Nostrand Reinold
ACGIH - Threshold Limit Values - 2004 Edition

The information contained herein is based on our state of knowledge at the above-specific date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.