

MATERIAL SAFETY DATA SHEET

ARGENTIUM SILVER FLUX

Dated: 01 July 2018



1. IDENTIFICATION OF THE PRODUCT AND THE COMPANY

Trade name: Argentium Silver Flux

Product type and uses: Liquid flux for soldering and fusing applications.

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. HAZARDOUS INGREDIENTS

Component	%	CAS	TLV	PEL
Ammonium Chloride	<5	12125-0209	10 mg/m ³	10 mg/m ³
Boric Acid	<20	10043-35-3	N.E.	N.E.
Sodium Tetraborate	<10	12179-04-3	1 mg/m ³	N.E.

3. PHYSICAL PROPERTIES

Vapour pressure: (mm/Hg)	N.A.	Specific gravity:	1.12
Vapour density (air = 1)	N.A.	Boiling point:	100°C / 212°F
Evaporation rate (butyl acetate = 1)	N.A.	Melting/freezing point:	N.A.
% Volatiles:	N.A.	Solubility in water:	Complete.
Appearance:	Yellow liquid.	pH:	7.1
Odour:	None.		

4. FIRE AND EXPLOSION DATA

Flash point:	Does not burn.
Auto-ignition temperature:	N.A.
Flammability limits in air %:	Upper (UEL): N.A. Lower (LEL): N.A.
Extinguishing media:	Product does not burn (select for surrounding fire).
Special firefighting procedures:	Toxic fumes of Na ₂ O, Boron and NO _x may be present. Firefighters should wear full turnout gear and SCBA.
Unusual fire or explosion hazards:	None.

5. REACTIVITY DATA

Stability:	Stable.
Hazardous polymerisation:	Will not occur.
Conditions to avoid:	Contact with incompatibles.
Incompatible materials:	Strong acids, oxidisers, reducing agents.
Hazardous by-products of decomposition:	Toxic fumes of Na ₂ O, Boron and NO _x .

6. HEALTH HAZARD DATA

Routes of entry:	Inhalation?	Yes
	Skin?	Yes
	Ingestion?	Yes
Acute:	The solution is mildly toxic by ingestion, resulting in nausea, vomiting, diarrhoea. Death may occur if ingested by small children. Contact with eyes will cause irritation. Contact with skin may cause irritation and redness or peeling if exposure is severe. Product is not absorbed through intact skin. Fumes created when soldering and fusing may be irritating to the respiratory tract.	
Chronic:	None.	
Carcinogenicity:	NTP?	No
	IARC monographs?	No
	OSHA regulated?	No
Medical conditions aggravated by exposure:	None.	

7. FIRST AID PROCEDURES

Eye contact:	Immediately flush with water for 15 minutes. Seek medical attention if irritation lasts for more than 30 minutes.
Skin contact:	Wash with soap and water. Remove contaminated clothing. Product will not be absorbed through intact skin. If exposure is severe, seek medical attention.
Inhalation:	Remove victim to fresh air. Restore breathing if necessary. If breathing is difficult, give oxygen. Seek medical attention.
Ingestion:	Do not induce vomiting. Give two glasses of water. Seek medical attention immediately.

8. PRECAUTIONS FOR SAFE HANDLING AND USE

In case of spill or leak:	Contain spill, then flush to waste treatment system (not sewer), or absorb onto chemical absorbent and sweep into a suitable container for disposal. Do not allow spill into sewers or surface waters. Product may be toxic to plant life.
Waste disposal:	Relevant legislation and regulations apply. Contact a hazardous waste disposal company.
Handling:	Wear appropriate protective equipment. Good local ventilation or fume hood is preferred. Wash hands after handling product.
Storage:	Store in a cool, dry place, away from incompatibles. Keep lid on container when not in use.

9. PERSONAL PROTECTION INFORMATION

Respiratory:	Fume hood or NIOSH approved respirator if air-borne concentrations exceed TLV or are unknown.
Eyes/face:	Chemical safety goggles.
Hands/body:	Neoprene or rubber gloves and apron.
Other:	Emergency eyewash station and safety shower.