

**Section 1. Identification of the material and the supplier**

Product: **Silver Brazing Flux Paste**  
 Product Code: 1711879, 1711880, 1711884  
 Product Use: Soldering flux  
 Restriction of Use: Refer to Section 15

**Australian Supplier:** **Bromic Pty Ltd (ABN 88 001 648 979)**  
 10 Phiney Place  
 Ingleburn, NSW, 2565, Australia

Tel: 1300 276 642  
**Australian Emergency No** **13 11 26 (National Poison Centre)**

Date of SDS Preparation: 6 May 2025

**Section 2. Hazards Identification**

Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia

**Pictograms**


Signal Word: **DANGER**

GHS Classification and Category	Hazard Code	Hazard Statement
Acute oral toxicity Cat. 4	H302	Harmful if swallowed.
Reproductive toxicity Cat. 1	H360	May damage fertility or the unborn child.
Skin corrosion Cat. 1B	H314	Causes severe skin burns and eye damage.
Serious eye damage Cat. 1	H318	Causes serious eye damage.

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read carefully and follow all instructions.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe fumes, vapours or spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P280	Wear protective clothing as detailed in SDS Section 8.

Response Code	Response Statement
P101	If medical advice is needed, have product container or label at hand.
P310	Immediately call a POISON CENTER or doctor/physician.
P330	Rinse mouth.

P363	Wash contaminated clothing before reuse.
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P301 + P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.

Storage Code	Storage Statement
P405	Store locked up.

Disposal Code	Disposal Statement
P501	Dispose of according to Local Regulations or Authorities

### Section 3. Composition / Information on Ingredients

Ingredients	Wt%	CAS NUMBER.
Boric acid	20-30 %	10043-35-3
Potassium bifluoride	20-30 %	7789-29-9
Potassium tetraborate tetrahydrate	5-10 %	12045-78-2
Potassium fluoride	5-10 %	7789-23-3
Ingredients determined not to be hazardous	Balance	

### Section 4. First Aid Measures

If in Eyes	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
If on Skin	Remove all contaminated clothing immediately. Wash gently and thoroughly with water and non-abrasive soap for 15 minutes. Ensure contaminated clothing is washed before re-use or discard. Immediately call a POISON CENTER or doctor/physician.
If Swallowed	Rinse mouth. Do NOT induce vomiting. Never give anything to the mouth of an unconscious person. If vomiting occurs, place victim face downwards, with the head turned to the side and lower than the hips to prevent vomit entering the lungs. Call a POISON CENTER or doctor/physician if you feel unwell.
If Inhaled	Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Get medical advice if breathing becomes difficult.

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

Symptoms:

If swallowed: Swallowing a small quantity of this material will result in serious health hazard. Harmful if swallowed.

Inhalation: Inhalation may cause: irritation, coughing, shortness of breath.

Skin: Causes severe skin burns and eye damage. Burns. Redness. Blisters.

Eyes: Causes serious eye damage.

Chronic: May damage fertility or the unborn child.

**Section 5. Fire Fighting Measures**

<b>Hazard Type</b>	Non-Flammable
<b>Hazards from combustion products</b>	Under fire conditions this product may emit toxic and/or corrosive vapours including oxides of potassium, boron and fluorine.
<b>Suitable Extinguishing media</b>	Carbon dioxide. Dry powder. Foam.
<b>Precautions for firefighters and special protective clothing</b>	Do not enter fire area without proper protective equipment, including respiratory protection. Wear fire/flame resistant/retardant clothing. Wear a self-contained breathing apparatus. Exercise caution when fighting any chemical fire. Do not allow run-off from firefighting to enter drains or water courses. Cool adjacent structures and containers with water spray to protect and prevent ignition.
<b>HAZCHEM CODE</b>	<b>2X</b>

**Section 6. Accidental Release Measures**

Evacuate all unprotected personnel. Do not breathe vapour. Do not breathe aerosol. Do not get in eyes, on skin, or on clothing. Use personal protective equipment as detailed in Section 8. Ensure adequate ventilation.

Avoid release to the environment.

Stop the flow of material, if this is without risk. Take up in non-combustible absorbent material and place into container for disposal. Dispose of waste according to applicable local and national regulations.

**Section 7. Handling and Storage****Precautions for Handling:**

- Read carefully and follow all instructions.
- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Do not breathe fumes, vapours or spray.
- Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Wear protective clothing as detailed in SDS Section 8.
- Use personal protective equipment as required.
- Do not get in eyes, on skin, or on clothing.
- Provide good ventilation in process area to prevent formation of vapour.
- Do not eat, drink or smoke when using this product.
- Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
- Wash contaminated clothing before reuse.

**Precautions for Storage:**

- Keep out of reach of children.
- Store locked up.
- Keep only in original container tightly closed.
- Store away from oxidising agents, strong bases/acids and halogens.

**Section 8 Exposure Controls / Personal Protection****WORKPLACE EXPOSURE STANDARDS (provided for guidance only)**

Substance	TWA	STEL
	ppm mg/m <sup>3</sup>	ppm mg/m <sup>3</sup>

No ingredients have exposure limits

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. AUST: Workplace Exposure Standards for Airborne Contaminants Oct 2022.

### Engineering Controls

Avoid creating mist or spray. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide local exhaust or general room ventilation. Use only in well-ventilated areas.

### Personal Protection Equipment



<b>Eyes</b>	Safety glasses with a full-face shield should be used. Eye protection devices should conform to relevant regulations. Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 (series) - Eye Protectors for Industrial Applications.
<b>Hands and Skin</b>	Wear gloves of impervious material such as natural rubber, nitrile rubber, neoprene or PVC. Suitable protective workwear, e.g. impervious clothing, rubber apron and safety shoes.
<b>Respiratory</b>	Wear appropriate mask. Use air-purifying respirator equipped with particulate filtering cartridges.
<b>General</b>	Do not eat, drink or smoke when using this product.

## Section 9 Physical and Chemical Properties

<b>Appearance</b>	White Paste
<b>Odour</b>	Odourless
<b>Odour Threshold</b>	Not available
<b>pH</b>	8-10
<b>Boiling Point</b>	100°C
<b>Melting Point</b>	Not available
<b>Freezing Point</b>	Not available
<b>Flash Point</b>	Not available
<b>Flammability</b>	Non-Flammable
<b>Upper and Lower Explosive Limits</b>	Not available
<b>Vapour Pressure</b>	Not available
<b>Vapour Density</b>	Not available
<b>Specific Gravity</b>	1.6 – 1.7
<b>Solubility in water</b>	Soluble
<b>Partition Coefficient:</b>	Not available
<b>Auto-ignition Temperature</b>	Not available
<b>Decomposition Temperature</b>	Not available
<b>Kinematic Viscosity</b>	Not available
<b>Volatile Component</b>	VOC content: 0%

## Section 10. Stability and Reactivity

<b>Stability of Substance</b>	Stable under normal conditions of storage and handling.
<b>Reactivity</b>	Reacts with incompatible materials.
<b>Conditions to Avoid</b>	Extremely high or low temperatures. Moisture.

<b>Incompatible Materials</b>	Strong acids. Strong bases. Strong oxidizing agents. Halogens.
<b>Hazardous Decomposition Products</b>	Thermal decomposition generates: Corrosive vapours. Potassium oxides. boron. Fluorine (F).

## Section 11 Toxicological Information

### Acute Effects:

<b>Swallowed</b>	Harmful if swallowed. Swallowing a small quantity of this material will result in serious health hazard. Harmful if swallowed.
<b>Dermal</b>	Not applicable.
<b>Inhalation</b>	Not triggered however, inhalation may cause: irritation, coughing, shortness of breath.
<b>Eye</b>	Causes serious eye damage.
<b>Skin</b>	Causes severe skin burns. Burns. Redness. Blisters.

### Chronic Effects:

<b>Carcinogenicity</b>	Not applicable.
<b>Reproductive Toxicity</b>	May damage fertility or the unborn child.
<b>Germ Cell Mutagenicity</b>	Not applicable.
<b>Aspiration</b>	Not applicable.
<b>STOT/SE</b>	Not applicable.
<b>STOT/RE</b>	Not applicable.

### Individual component information:

#### Acute Toxicity:

Chemical Name	Oral – LD50	Dermal – LD50	Inhalation – LC50
Product (Silver Brazing Paste)	387mg/kg (rat)	-	-
Boric Acid (10043-35-3)	2660mg/kg (Mouse)	2000 mg/kg (rabbit)	>2mg/L/4h (rat)
Potassium Fluoride (7789-23-3)	148.5 mg/kg	300mg/kg	1mg/I/4h ATE (rat) Gases: 700ppm/4h Dust/mist: 1 mg/l/4h
Potassium tetraborate tetrahydrate (12045-78-2)	3500-4100 mg/kg (rat)	>2000mg/kg(Rabbit)	-
Potassium Bifluoride (7789-29-9)	100 mg/kg (rat)	-	-

## Section 12. Ecotoxicological Information

Not hazardous to the environment.

<b>Persistence and degradability</b>	Product: Not established. Boric Acid: Not readily biodegradable. Potassium tetraborate tetrahydrate: Not biodegradable.
<b>Bioaccumulation</b>	Product: Not established. Boric acid BCF (fish, Oncorhynchus tshawytscha) : 34 mg/I, 90 days at 12° C Log Pow: -0.757 at 25 °C
<b>Mobility in Soil</b>	Product: Not established.
<b>Other adverse effects</b>	Prevent this material entering waterways, drains and sewers.

### **Acute Toxicity - Fish**

#### **Boric acid**

LC50 (Carassius auratus): 1.02 g/I/3 days

#### **Potassium tetraborate tetrahydrate (12045-78-2)**

LC50 (fish): 88 mg/I/96h

#### **Potassium bifluoride**

LC50 (fish): 51 (51 —340) mg/I/96h

#### **Potassium fluoride**

LC50 (fish): 1299 mg/I/48h

### **Acute Toxicity - Other Organisms**

#### **Boric acid**

EC50 (crustacea): 658 —875 mg/I/48h

#### **Potassium tetraborate tetrahydrate (12045-78-2)**

EC50 (crustacea): 242 mg/I/24h

#### **Potassium bifluoride**

EC50 (crustacea): 26 (26 —48) mg/I/96h

#### **Potassium fluoride**

EC50 (crustacea): 26 (26 —48) mg/I/96h

### **Other Information**

#### **Chronic**

#### **Boric acid**

LOEC (Salmo gairdneri): > 97 mg/I

## **Section 13. Disposal Considerations**

### **Disposal Method:**

The disposal of the spilled or waste material must be done in accordance with applicable local and national regulations.

**Precautions and methods to avoid:** Do not allow to enter waterways.

## **Section 14 Transport Information**

**This product is classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code) (7th edition).**



### **Road, Rail, Sea and Air Transport**

<b>UN No</b>	1740
<b>Class - Primary</b>	8
<b>Packing Group</b>	II
<b>Proper Shipping Name</b>	HYDROGENDIFLUORIDES, SOLID, N.O.S. (Contains potassium bifluoride)
<b>Marine Pollutant</b>	No
<b>Special Provisions</b>	If the product's individual container is below 1kg, it can be transported as a non-DG as long as the product packaging is still labelled as per DG requirements and the driver is given safety information in accordance with Chapter 3.4 of the UNRTDG.

## **Section 15 Regulatory Information**

Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia

Section 16	Other Information
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#### Glossary

Cat	Category
EC <sub>50</sub>	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC <sub>50</sub>	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD <sub>50</sub>	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

#### References:

1. Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice.
2. Standard for the Uniform Scheduling of Medicines and Poisons.
3. Australian Code for the Transport of Dangerous Goods by Road & Rail.
4. Model Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.
5. Workplace exposure standards for airborne contaminants, Safe work Australia.
6. American Conference of Industrial Hygienists (ACGIH).
7. Globally Harmonised System of classification and labelling of chemicals.

#### Disclaimer

This document has been prepared by a third party and serves as the suppliers Safety Data Sheet ('SDS'). It is based on information concerning the product which has been provided to a third party or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer. While the third party have taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, the third party accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS

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Please contact the Australian Manufacturer or distributor, if further information is required.

Issue Date: 6 May 2025      Review Date: 6 May 2030