

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

Product: **Regular Soldering Flux Paste**  
 Product Code: 1711881, 1711882 (22101), 1711883  
 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)**

New Zealand Supplier: **Bromic Group**  
 Address: Rhenus Logistics NZ Ltd  
 39 Richard Pearse Drive  
 Airport Oaks Mangere 2022  
 Telephone: 0508 276 642

**Emergency Telephone:** **0508 276 642**  
**0800 764 766 (National Poison Centre)**

Date of SDS Preparation: 15 June 2023

**Section 2. Hazards Identification**
**Australia:**

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

**New Zealand:**

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

**EPA Approval No: Metal Industry Products (Subsidiary) – HSR002612**

**Pictograms**


Signal Word: **Warning**

GHS Classification and Category	Hazard Code	Hazard Statement
Skin irritation Cat. 2	H315	Causes skin irritation.
Eye irritation Cat. 2	H319	Causes serious eye irritation.
Hazardous to the aquatic environment chronic Cat. 3	H412	Harmful to aquatic life with long lasting effects.

Prevention Code	Prevention Statement
P103	Read carefully and follow all instructions.

P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective clothing as detailed in Section 8.

Response Code	Response Statement
P362	Take off contaminated clothing and wash it before reuse.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.

Storage Code	Storage Statement
None allocated	

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

### Section 3. Composition / Information on Ingredients

Ingredients	Wt%	CAS NUMBER.
Ethanol, 2-amino-, hydrochloride	10 – 15	2002-24-6
Ammonium chloride	5 - 10	12125-02-9
2,6-Di-tert-butyl-4-methylphenol	0.1 – 0.5	128-37-0
1,4-dioxane	<0.03	123-91-1
Ethylene oxide	<0.03	75-21-8
Oxirane, methyl-	<0.03	75-56-9
Ingredients determined not to be hazardous	To Bal	

### Section 4. First Aid Measures

If in Eyes	If in eyes, hold eyelids apart and flush the eyes continuously with running water. Remove contact lenses. Continue flushing for several minutes until all contaminants are washed out completely. Seek medical attention.
If on Skin	Remove all contaminated clothing immediately. Wash affected area thoroughly with soap and water. Wash contaminated clothing before reuse or discard. Seek medical attention.
If Swallowed	Do not induce vomiting. Wash out mouth thoroughly with water. Seek immediate medical attention.
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: Causes skin irritation. Causes serious eye irritation.

### 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 irritating fumes, smoke and gases including ammonia, hydrogen chloride, carbon monoxide, carbon dioxide and oxides of nitrogen. This product will burn if exposed to fire.

<b>Suitable Extinguishing media</b>	Carbon dioxide, dry chemical, foam or water spray.
<b>Precautions for firefighters and special protective clothing</b>	Fire fighters should wear Self-Contained Breathing Apparatus (SCBA) operated in positive pressure mode and full protective clothing to prevent exposure to vapours or fumes. Water spray may be used to cool down heat-exposed containers. Fight fire from safe location. This product should be prevented from entering drains and watercourses.
<b>HAZCHEM CODE</b>	<b>None allocated</b>

## Section 6. Accidental Release Measures

Wear appropriate personal protective equipment and clothing to prevent exposure. Extinguish or remove all sources of ignition and stop leak if safe to do so. Increase ventilation. Evacuate all unprotected personnel.

In the event of a major spill, prevent spillage from entering drains or water courses. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

If possible, contain the spill. Place inert absorbent, non-combustible material onto spillage. Use clean non-sparking tools to collect the material and place into suitable labelled containers for subsequent recycling or disposal. Dispose of waste according to the applicable local and national regulations.

## Section 7. Handling and Storage

### Precautions for Handling:

- Read carefully and follow all instructions.
- Wash hands thoroughly after handling.
- Avoid release to the environment.
- Wear protective clothing as detailed in Section 8.
- Avoid inhalation of vapours and mists, and skin or eye contact.
- Use only in a well ventilated area.
- Keep containers sealed when not in use.
- Prevent the build-up of mists or vapours in the work atmosphere.
- Do not use near ignition sources.
- Do not pressurise, cut, heat or weld containers as they may contain hazardous residues.
- Maintain high standards of personal hygiene by washing hands prior to eating, drinking, smoking or using toilet facilities.

### Precautions for Storage:

- Store in a cool, dry, well-ventilated area away from sources of ignition, foodstuffs, clothing and incompatible materials such as oxidising agents.
- Keep containers closed when not in use, securely sealed and protected against physical damage.
- Inspect regularly for deficiencies such as damage or leaks.
- Have appropriate fire extinguishers available in and near the storage area.
- Take precautions against static electricity discharges.
- Use proper grounding procedures.

## 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>
Ammonium chloride fume	[12125-02-9]	-	10	-	20

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(2,6-Di-tert-butyl-p-cresol)	[128-37-0]	-	10	-	-
Dioxane	[123-91-1]	5	18	-	-
Ethylene oxide	[75-21-8]	0.1	0.2	-	-
Propylene oxide (1,2-Epoxypropane)	[75-56-9]	2	4.8	-	-

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.

New Zealand: Workplace Exposure Standards and Biological Exposure Indices NOV 2023 14TH EDITION.

AUST: Workplace Exposure Standards for Airborne Contaminants Oct 2022.

## Biological Limit Values

Name: Ethylene oxide [75-21-8]

Determinant: N-(2-hydroxyethyl)valine (HEV) hemoglobin adducts

BEI®: 5000 pmol HEV/g globin\*\*

\*\* Applies to workers having representative Ethylene oxide exposure during the previous 120 days.

Sampling time: Not critical

Notation: Ns

Determinant: S-(2-hydroxyethyl)mercapturic acid (HEMA) in urine

BEI®: 5 µg HEMA/g creatinine

Sampling time: End of shift

Notation: Pop, Ns

Source: American Conference of Industrial Hygienists (ACGIH)

## Engineering Controls

This substance is hazardous and should be used with a local exhaust ventilation system, drawing vapours away from workers' breathing zone. A flame-proof exhaust ventilation system is required. If the engineering controls are not sufficient to maintain concentrations of vapours/mists below the exposure standards, suitable respiratory protection must be worn. Refer to relevant regulations for further information concerning ventilation requirements.

## Personal Protection Equipment



<b>Eyes</b>	Safety glasses with side shields, chemical goggles or full-face shield as appropriate should be used. Final choice of appropriate eye/ face protection will vary according to individual circumstances. 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</b>	Wear gloves of impervious material such as nitrile. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken. Occupational protective gloves should conform to relevant regulations. Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.
<b>Body</b>	Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.
<b>Respiratory</b>	If engineering controls are not effective in controlling airborne exposure, then an approved respirator with a replaceable mist/dust filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements.

	Reference should be made to Australian/New Zealand Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.
<b>Hygiene Measures</b>	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.

## Section 9 Physical and Chemical Properties

<b>Appearance</b>	Yellowish to white liquid - paste
<b>Odour</b>	Faint
<b>Odour Threshold</b>	Not available
<b>pH</b>	6.5 - 7
<b>Boiling Point</b>	Not available
<b>Melting Point</b>	Not available
<b>Freezing Point</b>	Not available
<b>Flash Point</b>	>204°C (TOC)
<b>Flammability</b>	Not available
<b>Upper and Lower Explosive Limits</b>	Not available
<b>Vapour Pressure @20°C</b>	Not available
<b>Vapour Density</b>	Not available
<b>Specific Gravity</b>	1.1
<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>Viscosity @ 100°C</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>Possibility of Hazardous Reactions:</b>	Reacts with incompatible materials.
<b>Conditions to Avoid</b>	Heat, open flames and other sources of ignition. Sparks. Avoid excessive heat or cold.
<b>Incompatible Materials</b>	Strong oxidizing agents. Strong bases. Strong acids. Amines. Aluminum and other metals. Cyanides and sulfide salts.
<b>Hazardous Decomposition Products</b>	Thermal decomposition may result in the release of toxic and/or irritating fumes, dense black smoke and gases including: ammonia, hydrogen chloride, carbon monoxide, carbon dioxide and oxides of nitrogen.

## Section 11 Toxicological Information

### Acute Effects:

<b>Swallowed</b>	Does not contain any ingredients classified as acutely toxic however if ingested may irritate the gastric tract causing nausea and vomiting. LD50 (rat): >5000 mg/kg
<b>Dermal</b>	Does not contain any ingredients classified as acutely toxic.
<b>Inhalation</b>	Does not contain any ingredients classified as acutely toxic however inhalation of product vapours may cause irritation of the nose, throat and respiratory system. LC50 (rat): >20 mg/l/1h (vapours)

<b>Eye</b>	Causes serious eye irritation. On eye contact this product will cause tearing, stinging, blurred vision, and redness.
<b>Skin</b>	Causes skin irritation. Skin contact will cause redness, itching and swelling. Repeated exposure may cause skin dryness and cracking and may lead to dermatitis.

#### Chronic Effects:

<b>Carcinogenicity</b>	Does not contain any ingredients classified as carcinogenic.
<b>Reproductive Toxicity</b>	Does not contain any ingredients classified as toxic for reproduction.
<b>Germ Cell Mutagenicity</b>	Does not contain any ingredients classified as mutagenic.
<b>Aspiration</b>	Does not contain any ingredients classified as Asp Tox.
<b>STOT/SE</b>	Does not contain any ingredients classified as STOT SE.
<b>STOT/RE</b>	Does not contain any ingredients classified as STOT RE.

Information on individual components:

#### Ammonium chloride:

Acute Toxicity – Dermal = LD50 (rabbit): >2000 mg/kg

STOT – Repeated Exposure: NOAEL (subchronic, oral, animal/male, 90 days): >=580 mg/kg bodyweight 56 days

#### 2,6-Di-tert-butyl-4-methylphenol:

Acute Toxicity – Dermal = LD50 (rabbit): >2000 mg/kg

STOT – Repeated Exposure: NOAEL (oral, rat, 90 days): 25 mg/kg bodyweight/day Digestive, liver, urogenital, kidneys, glandular, thyroids, adrenal gland.

### Section 12. Ecotoxicological Information

Harmful to aquatic life with long lasting effects.

<b>Persistence and degradability</b>	Not readily biodegradable. May cause long-term adverse effects in the environment.
<b>Bioaccumulation</b>	2,6-Di-tert-butyl-4-methylphenol Log Pow: 5.2 This product is not bioaccumulating.
<b>Mobility in Soil</b>	2,6-Di-tert-butyl-4-methylphenol Ecology - soil: absorbs to soil particles and will not be mobile.
<b>Other adverse effects</b>	No information available

Prevent this material entering waterways, drains and sewers.

#### Acute Toxicity - Fish

Ammonium chloride LC50 (fish): 209 mg/l/96h

2,6-Di-tert-butyl-4-methylphenol LC50 (fish): 0.199 mg/l

#### Acute Toxicity - Other Organisms

Ammonium chloride

EC50 (crustacea): 101 mg/l/48h

2,6-Di-tert-butyl-4-methylphenol EC50 (crustacea): 0.48 mg/l

EC50 (other aquatic organisms): 0.758 mg/l NOEC (acute): 0.15 mg/l

### Section 13. Disposal Considerations

#### Disposal Method:

Dispose according to applicable local and state government regulations. Wastes including emptied containers are controlled wastes and should be disposed of in accordance with all

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applicable local and national regulations.

**Precautions and methods to avoid:** Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected.

## Section 14 Transport Information

**This product is NOT classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code) (7th edition).**

**This product is NOT classified as a Dangerous Good for transport in NZ ; NZS 5433:2020**

## Section 15 Regulatory Information

### Australia:

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

Not classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

### New Zealand:

This substance is classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval No: Metal Industry Products (Subsidiary) – HSR002612

HSW (HS) Regulations 2017 and EPA Notices	Trigger Quantity
Certified Handler	Not required
Location Certificate	Not required
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	1000L/kg
Emergency Response Plan	1000L/kg
Secondary Containment	1000L/kg
Restriction of Use	Only use for the intended purpose.

## Section 16 Other Information

### Glossary

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:

#### Australia:

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.

New Zealand:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices Nov 2023 14<sup>th</sup> edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2020
5. HSW (Hazardous Substances) Regulations 2017

Disclaimer

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

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