

SAFETY DATA SHEET

REGULAR SOLDERING FLUX PASTE

Infosafe No.: LQA80
ISSUED Date : 25/05/2020
ISSUED by: BROMIC PTY LTD

1. IDENTIFICATION

GHS Product Identifier

REGULAR SOLDERING FLUX PASTE

Company Name

BROMIC PTY LTD (ABN 88 001 648 979)

Address

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NSW 2565 AUSTRALIA

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Tel: 02 9426 5224

Emergency phone number

02 9426 5224 (24/7)

Recommended use of the chemical and restrictions on use

Soldering flux.

Disclaimer

Although the information and recommendations set forth in this SDS are presented in good faith and are believed to be correct as of the date of this SDS, Bromic Pty. Ltd., makes no representations as to the completeness or accuracy thereof. Information is supplied on the conditions that the persons receiving and using it will make their own determination as to the suitability for their purpose prior to use. In no event will Bromic Pty. Ltd. or any affiliate thereof be responsible for damages of any nature whatsoever resulting from the use or reliance on the information set forth in the SDS.

2. HAZARD IDENTIFICATION

GHS classification of the substance/mixture

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 Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Eye Damage/Irritation: Category 2A

Skin Corrosion/Irritation: Category 2

Hazardous to the Aquatic Environment - Acute Hazard: Category 3

Hazardous to the Aquatic Environment - Long-Term Hazard: Category 3

Signal Word (s)

WARNING

Hazard Statement (s)

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

Pictogram (s)

Exclamation mark

**Precautionary statement – Prevention**

P264 Wash contaminated skin thoroughly after handling.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statement – Response

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P362 Take off contaminated clothing and wash before reuse.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

Precautionary statement – Disposal

P501 Dispose of contents/container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Name	CAS	Proportion
Ethanol, 2-amino-, hydrochloride	2002-24-6	10-15 %
ammonium chloride	12125-02-9	5-10 %
2,6-Di-tert-butyl-4-methylphenol	128-37-0	0.1-0.5 %
1,4-dioxane	123-91-1	<0.03 %
ethylene oxide	75-21-8	<0.03 %
Oxirane, methyl-	75-56-9	<0.03 %
Ingredients determined not to be hazardous		Balance

4. FIRST-AID MEASURES

Inhalation

If inhaled, remove affected person from contaminated area. Keep at rest until recovered. If symptoms develop and/or persist seek medical attention.

Ingestion

Do not induce vomiting. Wash out mouth thoroughly with water. Seek immediate medical attention.

Skin

Remove all contaminated clothing immediately. Wash affected area thoroughly with soap and water. Wash contaminated clothing before reuse or discard. Seek medical attention.

Eye contact

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.

First Aid Facilities

Eyewash, safety shower and normal washroom facilities.

Advice to Doctor

Treat symptomatically.

Other Information

For advice in an emergency, contact a Poisons Information Centre (Phone Australia 131 126) or a doctor at once.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Carbon dioxide, dry chemical, foam or water spray.

Hazards from Combustion Products

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.

Specific Hazards Arising From The Chemical

This product will burn if exposed to fire.

Decomposition Temperature

Not available

Precautions in connection with Fire

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.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures

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. 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.

If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

7. HANDLING AND STORAGE

Precautions for Safe Handling

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.

Conditions for safe storage, including any incompatibilities

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. Ensure that storage conditions comply with applicable local and national regulations.

For information on the design of the storeroom, reference should be made to Australian Standard AS1940 - The storage and handling of flammable and combustible liquids.

Storage Regulations

Classified as a Class 2 (COMBUSTIBLE LIQUID) for the purpose of storage and handling, in accordance with the requirements of AS1940 2017.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limit values

No exposure standards have been established for this material. However, the available exposure limits for ingredients are listed below:

Ammonium chloride (fume)[12125-02-9]

TWA: 10 mg/m³
STEL: 20 mg/m³

2,6-Di-tert-butyl-4-methylphenol [128-37-0]
TWA: 10 mg/m³

1,4-dioxane [123-91-1]
TWA: 10 ppm, 36 mg/m³
NOTICES: Carc. 2, Sk

Ethylene oxide [75-21-8]
TWA: 1 ppm, 1.8 mg/m³
NOTICES: Carc. 1B

Oxirane, methyl- [75-56-9]
TWA: 20 ppm, 48 mg/m³
NOTICES: Carc. 1B

TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.

STEL (Short Term Exposure Limit): The average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

'Skin' Notice: Absorption through the skin may be a significant source of exposure. The exposure standard is invalidated if such contact should occur.

Source: Safe Work Australia

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)

Appropriate 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.

Respiratory Protection

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 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.

Eye Protection

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.

Hand Protection

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.

Body Protection

Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

Hygiene Measures

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Properties	Description	Properties	Description
Form	Liquid	Appearance	Yellowish to white liquid - paste
Colour	Yellowish to white	Odour	Faint
Decomposition Temperature	Not available	Melting Point	Not available
Boiling Point	Not available	Solubility in Water	Soluble
Specific Gravity	1.1	pH	6.5-7
Vapour Pressure	Not available	Vapour Density (Air=1)	Not available
Evaporation Rate	Not available	Odour Threshold	Not available
Viscosity	Not available	Volatile Component	VOC content: 0%
Partition Coefficient: n-octanol/water	Not available	Flash Point	>204 °C (TOC)
Flammability	Not flammable	Auto-Ignition Temperature	Not available
Flammable Limits - Lower	Not available	Flammable Limits - Upper	Not available
Explosion Properties	Product is not explosive	Oxidising Properties	No oxidizing properties

10. STABILITY AND REACTIVITY

Chemical Stability

Stable under normal conditions of storage and handling.

Reactivity and Stability

Reacts with incompatible materials.

Conditions to Avoid

Heat, open flames and other sources of ignition. Sparks. Avoid excessive heat or cold.

Incompatible materials

Strong oxidizing agents. Strong bases. Strong acids. Amines. Aluminum and other metals. Cyanides and sulfide salts.

Hazardous Decomposition Products

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.

Possibility of hazardous reactions

Reacts with incompatible materials.

Hazardous Polymerization

Will not occur.

11. TOXICOLOGICAL INFORMATION

Toxicology Information

Toxicity data for material given below.

Acute Toxicity - Oral

Product

LD50 (rat): >5000 mg/kg

Acute Toxicity - Inhalation

Product

LC50 (rat): >20 mg/l/1h (vapours)

Acute Toxicity - Dermal

Ammonium chloride

LD50 (rabbit): >2000 mg/kg

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

LD50 (rabbit): >2000 mg/kg

Ingestion

Ingestion of this product may irritate the gastric tract causing nausea and vomiting.

Inhalation

Inhalation of product vapours may cause irritation of the nose, throat and respiratory system.

Skin

Causes skin irritation. Skin contact will cause redness, itching and swelling. Repeated exposure may cause skin dryness and cracking and may lead to dermatitis.

Eye

Causes serious eye irritation. On eye contact this product will cause tearing, stinging, blurred vision, and redness.

Respiratory sensitisation

Not expected to be a respiratory sensitiser.

Skin Sensitisation

Not expected to be a skin sensitiser.

Germ cell mutagenicity

Not considered to be a mutagenic hazard.

Carcinogenicity

Not considered to be a carcinogenic hazard.

Ethylene oxide is listed as a Group 1: Carcinogenic to humans according to International Agency for Research on Cancer (IARC).

1,4-dioxane and Oxirane, methyl- are listed as a Group 2B: Possibly carcinogenic to humans according to International Agency for Research on Cancer (IARC).

2,6-Di-tert-butyl-4-methylphenol is listed as a Group 3: Not classifiable as to carcinogenicity to humans according to International Agency for Research on Cancer (IARC).

Reproductive Toxicity

Not considered to be toxic to reproduction.

STOT-single exposure

Not expected to cause toxicity to a specific target organ.

STOT-repeated exposure

Not expected to cause toxicity to a specific target organ.

Ammonium chloride

NOAEL (subchronic, oral, animal/male, 90 days): \geq 580 mg/kg bodyweight 56 days

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

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

Aspiration Hazard

Not expected to be an aspiration hazard.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Persistence and degradability

Product

Not readily biodegradable. May cause long-term adverse effects in the environment.

Mobility

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

Ecology - soil: absorbs to soil particles and will not be mobile.

Bioaccumulative Potential

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

Log Pow: 5.2

This product is not bioaccumulating.

Other Adverse Effects

Not available

Environmental Protection

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

13. DISPOSAL CONSIDERATIONS

Disposal considerations

Dispose of waste according to applicable local and national regulations. Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected. Wastes including emptied containers are controlled wastes and should be disposed of in accordance with all applicable local and national regulations.

14. TRANSPORT INFORMATION

Transport Information

Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

U.N. Number

None Allocated

UN proper shipping name

None Allocated

Transport hazard class(es)

None Allocated

IMDG Marine pollutant

No

Transport in Bulk

Not available

Special Precautions for User

Not available

15. REGULATORY INFORMATION

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.

Classified as a Scheduled 7 Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Schedule 7 Poisons should be available only to specialised or authorised users. Special regulations restricting their availability, possession, storage or use may apply.

Poisons Schedule

S7

16. OTHER INFORMATION

Date of preparation or last revision of SDS

SDS Created: May 2020

References

Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice.

Standard for the Uniform Scheduling of Medicines and Poisons.

Australian Code for the Transport of Dangerous Goods by Road & Rail.

Model Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.

Workplace exposure standards for airborne contaminants.

Adopted biological exposure determinants, American Conference of Industrial Hygienists (ACGIH).

Globally Harmonised System of Classification and Labelling of Chemicals.

Code of Practice: Managing Noise and Preventing Hearing Loss at Work.

END OF SDS

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