

GEMCUTS PTY LTD

Date of Issue 5-11-2019

**SAFETY DATA SHEET
HANDY FLUX**

IMPORTANT NOTICE: This Safety Data Sheet (SDS) is issued by Gemcuts Pty Ltd in accordance with National Occupational Health and Safety Commission guidelines. The information contained in this document must not be added to, deleted or altered. Gemcuts Pty Ltd will issue a new SDS when there is a change in the product specifications and/or with the National Occupational Health and Safety Commission guidelines/ regulations. Gemcuts Pty Ltd will not accept any responsibility for any changes made to its SDS in content by any other person or organisation.

CLASSIFICATION OF MATERIAL

Some of the chemicals that make this product is hazardous according to health criteria of Worksafe Australia

1. IDENTIFICATION OF THE MATERIAL & SUPPLIER

Product	Handy Flux
Recommended Use	Soldering
Supplier/Importer	Gemcuts Pty Ltd
ABN	43 780 687 841
Manufacturer	Euro Tool Inc.
Address	36A Smith Drive, West Ballina NSW 2478
Telephone Number	02 66911686
Facsimile	N/A
Email	admin@gemcuts.com.au
Emergency Telephone	131126 Poisons Information Centre 0427012014

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2. HAZARDS IDENTIFICATION

WARNING: Toxic in prolonged exposure.

2.1 Hazards Classification:

Reproductive Toxicity: Cat 1B

Acute Toxicity: Cat 3

NFPA HAZARD RATING	Fire: 0	Health: 3	Reactivity: 0
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2.2 Hazard Category: Hazardous substance. Non-Dangerous Goods

2.3 Hazard Phrase(s):

H301: Toxic if swallowed

H302: Harmful if swallowed

H305: May be harmful if swallowed and enters airways

H315: Causes skin irritation

H318: Causes serious eye damage

H319: Causes serious eye irritation

H331: Toxic if inhaled

H333: May be harmful if inhaled

H335: May cause respiratory irritation

H372: Causes damage to organs through prolonged or repeated exposure

H360: May damage fertility or the unborn child

2.4 Precautionary Phrase(s):

P202: Do not handle until all safety precautions have been read and understood.

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

P262: Do not get in eyes, on skin, or on clothing.

P264: Wash hands thoroughly after handling

P271: Use only outdoors or in a well-ventilated area.

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

P284: [In case of inadequate ventilation] Wear respiratory protection.

P308+P313: IF exposed or concerned: Get medical advice/attention.

Emergency Overview: Always seek medical attention if unwell or irritated by the use of this product. Always avoid over exposure.

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3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Product Description: White Paste, odourless

3.2 Contents

Chemical Name	CAS Number	Proportion %
Boric Acid	10043-35-3	15-30%
Potassium fluoride	7789-23-3	15-30%
Potassium tetraborate tetrahydrate	12045-78-2	15-30%

4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre,

Phone (Australia) 131 126

Inhalation: If signs and symptoms of toxicity are observed, remove subject from area, administer oxygen, and seek medical attention. Keep the subject warm and at rest. Perform artificial respiration if breathing has stopped.

Skin Contact: Remove contaminated clothing. Wash affected area with large quantities of water for at least five minutes. Seek medical attention if necessary. Launder clothes before re-using.

Eye Contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a Doctor.

Ingestion: If subject is conscious, induce vomiting. Seek immediate medical assistance. Never attempt to give anything by mouth to an unconscious or convulsive person.

Seek immediate medical assistance if symptoms persist or in the case of over exposure.

Notes to Doctor: Depending upon the dose, the component potassium fluoride may be toxic. Its concentration in the product is <300 gm/kg. Treat fluoride intoxication symptomatically. Intoxication may occur by ingestion and/or inhalation.

No components are absorbed through the skin, although irritation or dermatitis may occur.

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5. FIRE FIGHTING MEASURES

5.1 Explosion Hazard: This product is non-flammable and non-explosive. If it is present in a fire or explosion, potential decomposition by products may include boron oxide, boron trifluoride, and hydrogen fluoride.

5.2 Fire Fighting Advice: Fire fighters should use self-contained breathing apparatus.

5.3 Suitable Extinguishing Media: Water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

6. ACCIDENTAL RELEASE MEASURES

Emergency Action: Personal Protective Equipment should be used in recovery to avoid contact. Contain in a suitable closed container.

7. HANDLING & STORAGE

7.1 Handling Advice: Avoid inhalation and contact with eyes. Provide appropriate exhaust ventilation at places where fumes may form. For precautions, see section 2.4.

Good industrial hygiene should be taken.

7.2 Storage Advice: Keep container in a dry and well-ventilated place. Keep away from incompatible material. Section 10

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Occupational Exposure Limits:

Boric Acid 10043-35-3 TWA 2mg/m³ STEL 6mg/m³

Potassium fluoride 7789-23-3 TWA 2.5mg/m³

Potassium tetraborate tetrahydrate 12045-78-2 TWA unknow

8.2 Engineering Control Measures: Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. Avoid generating and breathing in dusts or fumes. Use with local and/or mechanical exhaust ventilation.

8.3 Personal Protective Equipment:

OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, HEAT PREVENTING GLOVES, APPROVED AIR PURIFYING RESPIRATOR.

Wear overalls, chemical goggles or face shield and chemical impervious gloves. Avoid contact and inhaling fumes. Wear dust mask/respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Always wash hands before smoking, eating, drinking or using the toilet, Wash contaminated clothing and other protective equipment before storage or re-use.

9. PHYSICAL & CHEMICAL PROPERTIES

Physical State:	Solid
Colour:	White
Odour:	None
Size (millimetres)	90mm x 90mm & 95mm x 50mm
Weight (grams)	454g & 198g
Solubility:	Soluble
Density	1.67
Boiling Point (°C):	>100°C
Ph	8.0

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10. STABILITY & REACTIVITY

Chemical Stability: Stable under normal conditions

Conditions to Avoid: Some components of the product may decompose at elevated temperatures.

Hazardous Reactions: Will not occur

Incompatible Materials: Acetic anhydride; alkali and alkali earth metals; zirconium; platinum; bromine trifluoride.

Hazardous Decomposition Products: Boron oxide, boron trifluoride, and/or hydrogen fluoride.

11. TOXICOLOGY INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Not a known carcinogen

In experimental studies, inorganic borates have been found to cause decreased sperm production and testicular effects in male rats, and developmental effects in fetuses of exposed female mice. No human reproductive effects attributable to borates have been reported.

Inorganic fluoride compounds have been demonstrated to induce mutagenic changes in mammalian cell in culture. The significance of these findings to human health risks is unknown.

Over exposure; Pre-existing pulmonary diseases (e.g., bronchitis, asthma) may be aggravated by inhalation overexposure. Chronic overexposure by ingestion or inhalation may aggravate diseases of the liver, kidneys, and the skeletal, nervous, and gastrointestinal systems.

Boric acid LD50: 2,660 mg/kg (oral/rat) LC50: No data available

Potassium fluoride LD50: 245 mg/kg (oral/rat) LC50: No data available

Potassium tetraborate tetrahydrate LD50: No data available LC50: No data available

12. ECOLOGICAL INFORMATION

In their intended manner of use, these products should not be released into the environment, and adverse effects on ecosystems are not anticipated under recommended conditions of use, storage, and disposal.

13 DISPOSAL CONSIDERATIONS

Commonwealth, State and Local laws governing disposal of material can differ. Ensure proper disposal compliance with the proper authority before disposal.

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14. TRANSPORT INFORMATION

No UN number has been assigned.

- 14.1 **Road and Rail Transport:** Not classified as hazardous or dangerous
- 14.2 **Marine Transport:** Not classified as hazardous or dangerous
- 14.3 **Air Transport:** Not classified as hazardous or dangerous

15. REGULATORY INFORMATION

Work Health and Safety Regulation 2017
Safe Work Australia HCIS
GHS 7
NTC

16. OTHER INFORMATION

This MSDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Gemcuts Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material. If clarification or further information is needed, the user should contact Gemcuts Pty Ltd at the contact details on page 1.

Gemcuts Pty Ltd responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.