

**GEMCUTS PTY LTD**

Date of Issue 13-08-2020

**SAFETY DATA SHEET  
BORAX**

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**

This product is hazardous according to health criteria of Worksafe Australia

**1. IDENTIFICATION OF THE MATERIAL & SUPPLIER**

<b>Product</b>	Borax, Sodium Borate, Sodium Tetraborate
<b>Recommended Use</b>	Soldering Flux and Industrial Manufacturing
<b>Supplier/Importer</b>	Gemcuts Pty Ltd
<b>ABN</b>	43 780 687 841
<b>Manufacturer</b>	Euro Tool Inc.
<b>Address</b>	36A Smith Drive, West Ballina NSW 2478
<b>Telephone Number</b>	02 66811686
<b>Facsimile</b>	N/A
<b>Email</b>	admin@gemcuts.com.au
<b>Emergency Telephone</b>	131126 Poisons Information Centre 0427012014

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### 2. HAZARDS IDENTIFICATION

#### 2.1 Signal Word:

WARNING

#### 2.2 Hazards Classification:

Reproductive Toxicity: Cat 1B

Serious Eye Damage/Irritant: Cat 2A

#### 2.2 Hazard Category:

Hazardous substance. Non-Dangerous Goods

#### 2.3 Hazard Phrase(s):

**H319:** Causes serious eye irritation

**H361:** Suspected of damaging fertility or the unborn child

#### 2.4 Precautionary Phrase(s):

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

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

**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.

**P405:** Store locked up

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

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

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Product Description:** White Crystals

**3.2 Contents**

Chemical Name	CAS Number	Proportion %
Disodium tetraborate pentahydrate	12179-04-3	>99%

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### 4. FIRST AID MEASURES

**For advice, contact a Poisons Information Centre,**

**Phone (Australia) 131 126**

**Inhalation:** If symptoms such as nose or throat irritation are observed, remove to fresh air.

**Skin Contact:** No treatment necessary.

**Eye Contact:** Use eye wash fountain or fresh water to cleanse eye. If irritation persists for more than 30 minutes, seek medical attention.

**Ingestion:** Swallowing small quantities (one teaspoon) will cause no harm to healthy adults. If larger amounts are swallowed, give two glasses of water to drink and seek medical attention.

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

**Notes to Doctor:** Symptoms of accidental over-exposure to high doses of inorganic borate salts have been associated with ingestion or absorption through large areas of severely damaged skin. These may include nausea, vomiting, and diarrhea, with delayed effects of skin redness and peeling.

Supportive care only is required for adult ingestion of less than a few grams of the product. For ingestion of larger amounts, maintain fluid and electrolyte balance and maintain adequate kidney function. Gastric lavage is only recommended for heavily exposed, symptomatic patients in whom emesis has not emptied the stomach. Haemodialysis should be reserved for patients with massive acute absorption, especially for patients with compromised renal function. Boron analyses of urine or blood are only useful for verifying exposure and are not useful for evaluating severity of poisoning or as a guide in treatment.

### 5. FIRE FIGHTING MEASURES

- 5.1** Special Hazard: None. The product is not flammable, combustible, or explosive
- 5.2** Fire Fighting Advice: Fire fighters should use self-contained breathing apparatus.
- 5.3** Suitable Extinguishing Media: Use extinguishing media most appropriate for the surrounding fire.

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### 6. ACCIDENTAL RELEASE MEASURES

**Emergency Action:** Avoid raising a dust cloud. Avoid inhalation and ingestion. Avoid contact with skin, eyes, and clothing. Evacuate the area of all non-essential personnel.

Wear protective clothing specified for normal operations (see Section 8)

Avoid spillage into water and cover drains.

Vacuum, shovel or sweep up and place in containers for disposal in accordance with applicable local regulations.

### 7. HANDLING & STORAGE

**7.1 Handling Advice:** Avoid ingestion and inhalation of dust. Avoid contact with eyes, skin, and clothing. If ingested, seek medical advice immediately and show the container or the label.

Minimize dust generation and accumulation. Keep containers closed when not in use. Ensure good ventilation at the workplace. Use with adequate ventilation. Wear suitable protective clothing. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Practice good personal hygiene, that is, always wash hands before eating, drinking smoking or using the toilet facilities. When using do not eat, drink or smoke. Keep away from incompatibles such as oxidizing agents.

**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:

Sodium Tetraborate Decahydrate 12179-04-3 TWA 5mg/m<sup>3</sup>

**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.

Individual PPE will vary with each risk assessment, generally the use of overalls, goggles or face shield AS 1337 and gloves Should comply with AS 2161. 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 80mm & 130mm
Weight (grams)	300g
Solubility:	40g/L @ 20°C
Density	1.73
Flash Point (°C):	N/A
Boiling Point (°C)	320°C
Ph	9.23

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### 10. STABILITY & REACTIVITY

**Chemical Stability:** Stable under normal conditions

**Conditions to Avoid:** Strong heating, dust generation and incompatible materials.

**Hazardous Reactions:** Will not occur

**Incompatible Materials:** Strong oxidizing agents, strong reducing agents, such as metal hydrides or alkali metals, acids, mineral acids, alkalis, acid anhydrides, alkaloids, alkaloidal salts, metals, metals in powder form, zirconium, mercuric chloride, zinc sulphate, and other metallic salts, and gums.

**Hazardous Decomposition Products:** Toxic and/or irritating gases, vapours and fumes of sodium oxide and borane/boron oxides.

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### 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:

**Acute Toxicity** - Oral - LD50 (rat): 4500 - 5000 mg/kg.

**Ingestion:** Harmful if swallowed. May cause irritation of the digestive tract, gastric upset, headache, nausea, vomiting, diarrhoea, abdominal pain, muscular spasms, dullness, weakness, fatigue, lethargy, cardiovascular disorders, circulatory depression, central nervous system depression, shock, convulsions, kidney and liver damage, coma, and death. The effects may be delayed. Rapidly absorbed via the gastrointestinal tract and mucous membranes. Ingestion of 5-10 grams has produced severe vomiting, diarrhoea, shock and death.

**Inhalation:** Inhalation of dust may cause mild irritation to nose, throat and respiratory system. Symptoms may include minor discomfort to throat and lungs and/or coughing, shortness of breath, sore throat, and nose bleeds

**Skin:** May cause mild irritation in contact with skin. Symptoms include mild transient discomfort, redness, itching, pain, and dry skin. Unlikely to cause any lasting effects. Borax is poorly absorbed through intact skin. May be harmful if absorbed through the skin, possibly producing systemic effects

**Eye:** May cause mild eye irritation. Symptoms may include redness, tearing, mild transient discomfort, pain, stinging and blurred vision. Unlikely to cause any lasting effects.

**Carcinogenicity:** Not a known carcinogen

**Reproductive Toxicity:** Studies with the chemically related boric acid in the rat, mouse and rabbit, at high doses, demonstrate developmental effects on the foetus, including foetal weight loss and minor skeletal variations. The doses administered were many times in excess of those to which humans would normally be exposed.

**Chronic Effects:** Prolonged or repeated ingestion or skin absorption may cause anorexia, weight loss, vomiting, mild diarrhoea, skin rash, convulsions, and anaemia. Repeated or prolonged contact with skin may cause dermatitis. Boron effects the central nervous system. Boron poisoning causes depression of the circulation, persistent vomiting and diarrhoea, followed by profound shock and coma. The temperature may become subnormal and a scarlatina form rash may cover the entire body.

### 12. ECOLOGICAL INFORMATION

**Acute Toxicity** – Daphnia: Daphnia magna EC50: 1085-1402 mg/l /48 h.

**Acute Toxicity** – Algae: Desmosomes subspicatus IC50: 158 mg/l /96 h (anhydrous substance)

**Ecotoxicity:** Herbicidal effect. Trace element. Fertilizing effect possible. No ecological problems are to be expected when the product is handled and used with due care and attention.

**Persistence and degradability:** N/A

**Bio accumulative Potential:** Concentration in organisms is not to be expected

**Biological Properties:** Herbicidal effect

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### 13 DISPOSAL CONSIDERATIONS

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

### 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**  
**ADG**  
**IMDB**

### 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.