



Twin Plaza Metals

SAFETY DATA SHEET

BORACIC ACID

Infosafe No.: LQ711

Issued Date: 24/01/2017

Issued by: TWIN PLAZA METALS PTY LTD

1. IDENTIFICATION

GHS Product Identifier

BORACIC ACID

Company Name

TWIN PLAZA METALS PTY LTD

Address

Level 1, 155 Castlereagh Street Sydney
New South Wales 2000 Australia

Telephone/Fax Number

Tel: 02 9264 1667 (Mon-Fri; 9.00am - 4.45 pm)

Fax: 02 9264 2653

Emergency phone number

Poison Information Centre 13 11 26

E-mail Address

sales@twinplaza.com

Recommended use of the chemical and restrictions on use

Analytical reagent, antibacterial agent, artificial gems, bactericide, borates, carpets, cosmetics, crockery, dyeing cotton and textiles, electric condensers, enamels, eyewash, fireproofing fabrics, fungus control on citrus fruits, glass fibres, hardening steel, hats, heat-resistant (borosilicate) glass, impregnating wicks, insecticide, insecticide, laboratory reagent, leather, manufacture of cements, metallurgy, nickel electroplating baths, ointment, painting, photography, porcelain, preservative, printing, soaps and weatherproofing wood.

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)

Toxic to Reproduction: Category 1B

Signal Word (s)

DANGER

Hazard Statement (s)

H360 May damage fertility or the unborn child.

Pictogram (s)

Health hazard



Precautionary statement – Prevention

P201 Obtain special instructions before use.

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

P281 Use personal protective equipment as required.

Precautionary statement – Response

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

Precautionary statement – Storage

P405 Store locked up.

Precautionary statement – Disposal

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Name	CAS	Proportion
Boric acid	10043-35-3	100 %

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

If ingested, do not induce vomiting. Wash out mouth thoroughly with water. If symptoms develop seek medical attention.

Skin

Wash affected area thoroughly with soap and water. If symptoms develop 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. If symptoms develop and/or persist seek medical attention.

First Aid Facilities

Eyewash 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

Use appropriate fire extinguisher for surrounding environment.

Hazards from Combustion Products

Under fire conditions this product may emit toxic and/or irritating fumes and gases.

Specific Hazards Arising From The Chemical

This product is non combustible. However heating can cause expansion or decomposition leading to violent rupture of containers.

Decomposition Temperature

185°C (Melting point)

Precautions in connection with Fire

Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. Fight fire from safe location.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures

Increase ventilation. Evacuate all unprotected personnel. Wear sufficient respiratory protection and full protective clothing to prevent exposure. Sweep up material avoiding dust generation or dampen spilled material with water to avoid airborne dust, then transfer material to a suitable container. Wash surfaces well with soap and water. Seal all wastes in 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 dust, and skin or eye contact. Use only in a well ventilated area. Keep containers sealed when not in use. Avoid contact with moisture. Prevent the build up of dust in the work atmosphere. Maintain high standards of personal hygiene i.e. Washing hands prior to eating, drinking, smoking or using toilet facilities. Avoid exposure. Do not handle until all safety precautions have been read and understood. It is recommended that pregnant or breastfeeding women should not handle this product unless adequate exposure protection can be assured at all times. Female personnel planning pregnancy should be made aware of the potential risks.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated area, out of direct sunlight and moisture. Store in suitable, labelled containers. Keep containers tightly closed. Store away from incompatible materials. Ensure that storage conditions comply with applicable local and national regulations.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limit values

No exposure standards have been established for the mixture. However, over-exposure to some chemicals may result in enhancement of pre-existing adverse medical conditions and/or allergic reactions and should be kept to the least possible levels.

Biological Limit Values

No biological limits allocated.

Appropriate Engineering Controls

This substance is hazardous and should be used with a local exhaust ventilation system, drawing solid/dust away from workers' breathing zone. If the engineering controls are not sufficient to maintain concentrations of particulates below the exposure standards, suitable respiratory protection must be worn.

Respiratory Protection

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable dust/particulate filter should be used. 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.

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 - Eye Protectors for Industrial Applications.

Hand Protection

Wear gloves of impervious material such as rubber or plastic gloves. 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Properties	Description	Properties	Description
Form	Powder	Appearance	White granules or powder
Colour	White	Odour	Odourless
Decomposition Temperature	185°C (Melting point)	Melting Point	185°C
Boiling Point	300°C	Solubility in Water	50 g/L (21°C) Solubility in water is increased by HCl, citric acid, tartaric acid and heat.
Solubility in Organic Solvents	Soluble in alcohol, acetone and glycerol.	Specific Gravity	1.435 (15°C)
pH	5.1 approximate (1.8g/l, 25°C)	Vapour Pressure	2.7 hPa (20°C)
Vapour Density (Air=1)	Not applicable	Evaporation Rate	Not available
Odour Threshold	Not available	Viscosity	Not available
Volatile Component	Not available	Partition Coefficient: n-octanol/water	Not available
Flash Point	Not applicable	Flammability	Non-combustible
Auto-Ignition Temperature	Not applicable	Explosion Limit - Upper	Not applicable
Explosion Limit - Lower	Not applicable	Molecular Weight	61.83

Other Information

Taste: Faintly bitter.

10. STABILITY AND REACTIVITY

Chemical Stability

Stable under normal conditions of storage and handling.

Reactivity and Stability

Not available

Conditions to Avoid

Incompatible materials, excess heat, dust generation, high temperatures.

Incompatible materials

Potassium, acetic anhydride, alkali metals, alkali carbonates and hydroxides.

Hazardous Decomposition Products

Under fire conditions this product may emit toxic and/or irritating fumes and gases: Boron compounds, boron oxides, borate fumes.

Possibility of hazardous reactions

Contact with potassium or acetic anhydride may cause explosion.

Hazardous Polymerization

Will not occur

11. TOXICOLOGICAL INFORMATION

Toxicology Information

Toxicity data available for this product is given below

Acute Toxicity - Oral

LD50 (rat): 2660mg/kg

Acute Toxicity - Dermal

LD50 (rat): >2000 mg/kg

Ingestion

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

Swallowing large quantities (> 0.3 g/kg or > 15 g / 50 kg person) may be fatal. Absorption of large quantities may cause agitation, spasms, tiredness, ataxia (lack of coordination) and drop in body temperature. Other symptoms include: central nervous system depression, characterised by excitement, followed by headache, dizziness, fatigue and coma. May cause circulatory system failure. May cause disturbances to the digestive tract, peripheral nervous system, urinary and endocrine system.

Inhalation

Inhalation of dusts may irritate the respiratory system. Chronic exposure to this material may aggravate existing respiratory disorders and lung disorders such as bronchitis, emphysema and asthma. Onset and progression are related to dust concentrations and duration of exposure.

Skin

Skin contact may cause mechanical irritation resulting in redness and itching.

Eye

Eye contact may cause mechanical irritation. May result in mild abrasion.

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.

Reproductive Toxicity

May damage fertility or the unborn child. Classified as a Known or presumed human reproductive or developmental toxicant.

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.

Aspiration Hazard

Not expected to be an aspiration hazard.

Other Information

Ingestion or absorption may cause nausea, diarrhea, abdominal cramps, erythematous lesions on skin and mucous membranes, circulatory collapse, tachycardia, cyanosis, delirium, convulsions and coma.

Death has occurred from <5 g in infants and from 5 to 20 g in adults. Prolonged absorption can result in anorexia, weight loss, gastrointestinal irritation, vomiting, mild diarrhoea, skin rash, alopecia, convulsions and anaemia. May cause kidney damage. Chronic use may cause borism - dry skin, eruptions and gastric disturbances.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity data available for this product is given below

Persistence and degradability

Methods for the determination of biodegradability are not applicable to inorganic substances.

Mobility

Not available

Bioaccumulative Potential

No bioaccumulation is to be expected (log P(o/w) <1.0).

Other Adverse Effects

Not available

Environmental Protection

Prevent this material entering waterways, drains and sewers.

Acute Toxicity - Daphnia

LC50 (Water flea): 53.2 mg/l/21d.

13. DISPOSAL CONSIDERATIONS

Disposal considerations

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

14. TRANSPORT INFORMATION

Transport Information

Road and Rail Transport (ADG Code):

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

Marine Transport (IMO/IMDG):

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

Air Transport (ICAO/IATA):

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

U.N. Number

None Allocated

UN proper shipping name

None Allocated

Transport hazard class(es)

None Allocated

Special Precautions for User

Not available

IMDG Marine pollutant

No

Transport in Bulk

Not available

15. REGULATORY INFORMATION

Regulatory information

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

Poisons Schedule

S5

Australia (AICS)

All components of this product are listed on the Inventory or exempted.

16. OTHER INFORMATION

Date of preparation or last revision of SDS

SDS created: January 2017

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.

Empirical Formula & Structural Formula

H3 BO3

END OF SDS

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