

02 NOV 1998

1. Identification of the substance/preparation and company/undertaking.

NAME Boric Acid
Synonyms Orthoboric Acid

S.D.S. No. B016

Supplied by:



NORTH STREET, BRIDGTOWN, CANNOCK, STAFFORDSHIRE WS11 3AZ
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2. Composition/information on ingredients.

Contains:

<u>Chemical</u>	<u>% Conc</u>	<u>Classification</u>	<u>Exposure</u>	<u>CAS</u>	<u>EINECS</u>
Boric Acid				10043-35-3	233-139-2

3. Hazards identification.

Mild mechanical irritation. Large amounts of boric acid can be harmful to plants and other species.

4. First Aid measures.

<u>Exposure</u> <u>Route</u>	<u>Symptom</u>	<u>Treatment</u>
Inhalation	Irritation of nose and throat.	Remove from exposure, rest and keep warm. In severe cases, or if recovery is not rapid or complete seek medical attention.
Skin Contact	Mechanical irritation.	Drench the skin with plenty of water. Remove contaminated clothing and wash before reuse. If large areas of the skin is damaged or if irritation persists seek medical attention.
Eye Contact	Mechanical irritation.	Irrigate thoroughly with water for at least 10 minutes. Obtain medical attention.
Ingestion	Irritation of throat and upper digestive tract.	Wash out mouth with water. Do not induce vomiting. If patient is conscious, give water to drink. If patient feels unwell seek medical attention.

Immediate Treatment / Antidote: Symptomatic treatment.

5. Fire Fighting measures.

Suitable Extinguishers Use extinguisher suitable to cause of fire.

Hazardous Combustion Products Material is a fire retardant.

6. Accidental Release measures.

Safety Precautions Wear appropriate PPE - See section 8

Environmental Precautions Avoid raising dust.

Clean up Procedure Vacuum or sweep up and place in suitable labelled containers.
Hold for waste disposal.

7. Handling & Storage.

Handling Ventilation General ventilation.

Recommended procedures & equipment Avoid creating dusts.

Storage Temperature range Cool.

Keep away from See section 10

Suitable storage Media Store in original containers.

8. Exposure Controls/personal protection.

Exposure Limits 10mg/m³, total; 5mg/m³, respirable: 8h TWA Type EH40 guidance.
Monitoring Method Dust monitoring.

Protective Measures

Respiratory: Type approved RPE for dusts if required.

Hand: Gloves

Eye: Goggles

Skin: Lightweight overalls

Hygiene Measures Always wash thoroughly after handling chemicals.

9. Physical & Chemical Properties.

Appearance	White crystalline granules or powder
pH	3.7 (4.7% solution @ 20°C)
Melting Point/range	171°C
Flammability	Not flammable. Material is a fire retardant.
Relative density	ca. 880 Kg/m ³
Solubility in water	4.6% w/w saturated solution @ 20°C; 27.5% @ 100°C

10. Stability & Reactivity.

Stability Stable in normal conditions

11. Toxicological Information.Effects

Solid materials may cause mechanical irritation. The material in solution is of very low hazard (dilute solutions are ingredients of some eye lotions). No evidence of carcinogenicity in a 2 year feeding study with mice. Negative results in mutagenicity tests. Reproductive and development toxicity noted in animals fed large doses of borates over a prolonged period. No evidence of such effects in humans.

LD₅₀ 200 mg/Kg oral-woman; 147 mg/Kg unreported route of access-man
LD₅₀ 2660 mg/Kg oral-rat

12. Ecological Information.Environmental Effects

Boron is an essential micro-nutrient for plant growth, but in large quantities can be phytotoxic.

Mobility Soluble in water, and is leachable through normal soil.

Aquatic toxicity LC₅₀, 96h, Dab = 74mg B/l; LC₅₀, 24 day, Rainbow Trout (embryo-larval stage) = 150mg B/l; LC₅₀, 24h, Daphnia magna = 242mg B/l; EC₁₀, 96h, Green Algae = 242mg B/l.

13. Disposal considerations.

Substance Via an authorized waste disposal contractor to an approved waste disposal site, observing all local and national regulations.

Container As substance.

14. Transport Information.

Not regulated for transport.

15. Regulatory Information.

Supply label details Ref. CHIP '96

Label Name Boric Acid

Symbols }

Risk phrases } No risk or safety phrases stipulated.

Safety phrases }

E.E.C. No

Use of this material may be governed by the following regulations:-

Users are advised to consult these regulations for further information.

The information contained in this data sheet does not constitute an assessment of workplace risks.

16. Other Information.

This material is usually used for:

Ceramics; Fluxes; Glass production; Flame retardants; Timber preservatives; Electroplating; etc.

It must not be used for:

Further details may be available upon request from your local Ellis & Everard distribution site.

Legal Disclaimer:

The above information is based on the present state of our knowledge of the product at the time of publication. It is given in good faith, no warranty is implied with respect to the quality or the specification of the product. The user must satisfy himself that the product is entirely suitable for his purpose.

Revision No 2 Dated September 1996

Replaces S.D.S. Dated February 1996
