

DisChem Boric Acid

Fast Dissolving, High Purity (99.8%) Boric Acid

Document ID: DBAM1906

1: PRODUCT AND COMPANY IDENTIFICATION:

1.1 Product Identifiers

Product: Boric Acid
Product No: DBA
CAS-No: 10043-35-3

1.2 Supplier Information

DisChem, Inc.
17295 Boot Jack Rd, Suite A
PO Box 267
Ridgway, PA 15853 USA
Tel: 814-772-6603
Fax: 814-772-09476
E-Mail: info@opticalchemistries.com
Web Site: www.discheminc.com

**1.3 EMERGENCY TELEPHONE NUMBER (CHEMTREK): CALL TOLL FREE / COLLECT
24 HRS FOR CHEMICAL EMERGENCIES (CCN6727)
+ (800) 424 - 9300 (United States Only)
++ (703) 527 - 3887 (Outside the United States)**

2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS). Reproductive toxicity (Category 2), H361 For the full text of the H Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements



Pictogram:

Signal word: Warning

Hazard statement(s)

H361: Suspected of damaging fertility or the unborn child.

Precautionary statement(s):

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.

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

P405: Store locked up.

P501: Dispose of contents/ container to an approved waste disposal plan

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None

3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances

Formula: H₃BO₃

Molecular weight: 61.83 g/mol

CAS No.: 10043-35-3

EC No.: 233-139-2

Hazardous Components:

Component	Classification	Concentration
Boric acid. Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)		
	Repr.2; H361	<=100 %

For the full text of the H- Statements mentioned in this Section, see Section 16.

4: FIRST AID MEASURES

4.1 Description of first aid measures

General advice: Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact Wash off with soap and plenty of water. Consult a physician.

In case of eye contact Flush eyes with water as a precaution.

If swallowed Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5: FIREFIGHTING MEASURES

5.1 Extinguishing media: Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture: Borane/boron oxides

5.3 Advice for firefighters: Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

No data available

6: ACCIDENTAL RELEASE MEASURES**6.1 Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13

7: HANDLING AND STORAGE**7.1 Precautions for safe handling**

Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well ventilated place. Moisture sensitive.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Components with workplace control parameters

Component	CAS No.	Value	Control parameters	Basis
Boric acid	10043-35-3	TWA	2.000000 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
	Remarks	Upper respiratory tract irritation Not classifiable as a human carcinogen varies		
		STEL	6.000000 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
		Upper respiratory tract irritation Not classifiable as a human carcinogen varies		
		TWA	2.000000 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
		Upper respiratory tract irritation Not classifiable as a human carcinogen Varies		
		TWA	2.000000 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
		Upper respiratory tract irritation Not classifiable as a human carcinogen Varies		
		STEL	6.000000 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
		Upper respiratory tract irritation Not classifiable as a human carcinogen Varies		
		STEL	6.000000 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
		Upper respiratory tract irritation Not classifiable as a human carcinogen varies		

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection: Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection: impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) Appearance	Form: solid
b) Odour	No data available
c) Odour Threshold	No data available
d) pH	5.1 at 1.8 g/l at 25 °C (77 °F)
e) Melting point/freezing point	Melting point/range: 160 °C (320 °F)-dec.
f) Initial boiling point/boiling range	300 °C (572 °F)
g) Flash point	No data available
h) Evaporation rate	No data available
i) Flammability (solid, gas)	No data available
j) Upper/lower flammability or explosive limits	No data available
k) Vapour pressure	3.5 hPa (2.6 mmHg) at 20 °C (68 °F)
l) Vapour density	No data available
m) Relative density	1.440 g/cm ³
n) Water solubility	soluble
o) Partition coefficient: n-octanol/water	No data available

p) Auto ignition temperature	No data available
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosive properties	No data available
t) Oxidizing properties	No data available

9.2 Other safety information

No data available

10: STABILITY AND REACTIVITY

10.1 Reactivity: No data available

10.2 Chemical stability: Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions: No data available

10.4 Conditions to avoid: Exposure to moisture

10.5 Incompatible materials: Potassium, Acid anhydrides

10.6 Hazardous decomposition products: No data available. In the event of fire: see section 5

11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity:

LD50 Oral-Rat - 2,660 mg/kg

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

In animal testing, risk of impaired fertility was shown only after administration of very high doses of this substance.

Specific target organ toxicity -single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

RTECS: ED4550000

Toxicity reported for borates in humans: ingestion or absorption may cause nausea, vomiting, diarrhea, abdominal cramps, and erythematous lesions on the skin and mucous membranes. Other symptoms include: circulatory collapse, tachycardia, cyanosis, delirium, convulsions, and coma. Death has been reported to occur in infants from less than 5 grams and in adults from 5 to 20 grams.
Liver irregularities based on human evidence

12: ECOLOGICAL INFORMATION**12.1 Toxicity**

Toxicity to fish: LC50-Ptychocheilus lucius-279 mg/l-96 h. LC0-Lepomis macrochirus (Bluegill)-> 1,021 mg/l-96 h

Toxicity to daphnia and other aquatic invertebrates:LC50 - Daphnia magna (Water flea) 53.2 mg/l-21 d. EC50-Daphnia magna (Water flea)-133 mg/l-48 h

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

No data available

13: DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods**

Product Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging: Dispose of as unused product.

14: TRANSPORT INFORMATION

DOT (US) Not dangerous goods

IMDG Not dangerous goods

IATA Not dangerous goods

Additional information:

Export / Import Description: Boric Acid, HS# 2810.20.0000

15: REGULATORY INFORMATION**SARA 302 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

Boric acid CAS -No.10043-35-3

New Jersey Right To Know Components

Boric acid CAS -No.10043-35-3

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

Full text of H- Statements referred to under sections 2 and 3.

H361 Suspected of damaging fertility or the unborn child.

Repr. Reproductive toxicity

HMIS Rating

Health hazard: 1

Chronic Health Hazard:*

Flammability: 0

Physical Hazard: 0

NFPA Rating

Health hazard: 0

Fire Hazard: 0

Reactivity Hazard: 0

SDS US (GHS HazCom 2012)

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