

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Boric Acid Technical Grade

Synonyms: boric acid

CAS Number: 10043-35-3

Grade/Purity: Technical Grade

Product Type: Acids

Product Use: Industrial, Manufacturing or Laboratory use

Manufacturer/Supplier: Alliance Chemical, 204 South Edmond St, Taylor, Texas 76574

Information: 512-365-6838 | www.alliancechemical.com

Emergency: CHEMTEL - 800-255-3924 (24 Hours/Day, 7 Days/Week)

2. HAZARDS IDENTIFICATION

Signal Word: Danger

GHS Pictograms:



Hazard Statements:

H360FD	May damage fertility. May damage the unborn child.
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Precautionary Statements:

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P280	Wear protective gloves, protective clothing, and eye/face protection.
P308+P313	IF exposed or concerned: Get medical advice or attention.
P405	Store locked up.
P501	Dispose of contents and container in accordance with local, regional, national, and international regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	% MIN	% MAX	CAS #	EINECS# / ELINCS#	FORMULA	MOLECULAR WEIGHT
Boric Acid	99.5	100.5	10043-35-3	233-139-2	BH3O3	61.84 g/mol

4. FIRST-AID MEASURES

Eyes	Rinse with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention immediately.
Skin	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing. Wash with soap. Get medical attention immediately.
Inhalation	Move person to fresh air and keep comfortable for breathing. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately.
Ingestion	Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention immediately.

5. FIRE-FIGHTING MEASURES

Suitable Media	Use water spray, alcohol-resistant foam, dry chemical, or CO2. Use measures appropriate to local circumstances.
Unsuitable Media	Do not use a solid water stream as it may scatter and spread fire.
Protective Equipment	Wear self-contained breathing apparatus and full protective clothing.
Combustion Products	May include carbon oxides and other toxic fumes. See Section 10.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Use PPE as described in Section 8. Ensure adequate ventilation. Evacuate personnel to safe areas.
Environmental	Prevent leakage or spillage from entering drains, sewers, or waterways.
Containment & Cleanup	Absorb with inert material. Collect in appropriate waste container. Dispose per applicable regulations.

7. HANDLING AND STORAGE

Safe Handling	Use with adequate ventilation. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling. Keep container closed when not in use.
Safe Storage	Store in a cool, dry, well-ventilated area. Keep away from incompatible materials (see Section 10). Keep containers tightly closed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Use adequate ventilation. Provide eyewash stations and quick-drench showers accessible to areas of use.

Occupational Exposure Limits:

AGENCY	EXPOSURE LIMIT
NIOSH REL	5 mg/m ³ TWA

Eyes	Wear chemical safety goggles or face shield.
Skin	Wear chemical-resistant gloves and protective clothing.
Inhalation	Use NIOSH-approved respirator if exposure limits are exceeded or irritation occurs.

Exposure limits sourced from NIOSH Pocket Guide and OSHA 29 CFR 1910.1000. Hazard classification from ECHA Classification and Labelling Inventory (CLP Annex VI).

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White fine crystalline powder, lightweight texture
Odor	Odorless
Median Particle Size	Not Available
Particle Size Distribution	Not Available
Particle Shape	Not Available
Surface Area	Not Available
Dustiness	Not Available
Hygroscopicity	Not Available
pH	3,8-4,8 (3,3 % aqueous solution)
Melting Point	340 °F (NTP, 1992)
Boiling Point	572 °F at 760 mmHg (decomposes) (NTP, 1992)
Flash Point	Not Available
Vapor Pressure	1.6X10 ⁻⁶ mm Hg at 25 °C (2.136X10 ⁻⁴ Pa); log P (in Pa) = 26.83 - 9094/T where T is deg K
Specific Gravity	1.435
Solubility	High water solubility

Molecular Formula	BH ₃ O ₃
Molecular Weight	61.84 g/mol

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under recommended storage conditions.
Hazardous Reactions	None under normal processing conditions.
Conditions to Avoid	Heat, sparks, open flame, and incompatible materials.
Incompatible Materials	Strong oxidizing agents, strong acids, strong bases.
Decomposition Products	May produce carbon oxides and other toxic fumes when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: See Section 2 for GHS hazard classification.

IARC	Not listed as carcinogen.
NTP	Not listed as carcinogen.
OSHA	Not listed as carcinogen.

12. ECOLOGICAL INFORMATION

Ecotoxicity	Fish LC50: 79 mg/L (96 h, Oncorhynchus mykiss — 79 ppm hard / 100 ppm soft water; cf. Ictalurus punctatus 22 ppm hard)
Persistence	Persistent as boron — Does not biodegrade (inorganic boron)
Bioaccumulation	BCF No bioaccumulation reported for boron compounds
Mobility in Soil	High soil mobility; leaches readily (pH-dependent adsorption, max pH 8.5–9)

13. DISPOSAL CONSIDERATIONS

Dispose of contents/container in accordance with applicable federal, state, and local regulations. Do not dispose of into drains or waterways.

14. TRANSPORT INFORMATION

US DOT	Not regulated as dangerous goods.
IMDG	Not regulated as dangerous goods.
IATA/ICAO	Not regulated as dangerous goods.
Marine Pollutant	No
Note	Hazard communication note: Product may meet GHS hazard criteria for workplace handling, while not being regulated as dangerous goods for transport.

15. REGULATORY INFORMATION

TSCA Inventory	Listed.
SARA 313 (TRI)	Not listed.
California Prop 65	Not listed.
SARA 311/312	See Section 2 for hazard classifications.

Data retrieved as of — TSCA Inventory: 2026-08-02; SARA 313 (TRI): 2026-08-02; California Prop 65: 2026-08-02

16. OTHER INFORMATION

Revision Date: 08/25/2026

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