



HI-VALLEY CHEMICAL

LABORATORY PRODUCTS

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SAFETY DATA SHEET

Hi Valley Chemical

Boric Acid

1 PRODUCT AND COMPANY IDENTIFICATION

Supplier Details: High Valley Products, Inc.
1134 West 850 North
Centerville, Utah 84014

Emergency: PERS: 800-633-8253

Phone: 801-295-9591

Email: sales@hvchemical.com

Web: www.hvchemical.com

2 HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

GHS Classification in Accordance with 29 CFR 1910 (OSHA HCS):
Health, Reproductive toxicity, 2

GHS Label Elements, Including Precautionary Statements

GHS Signal Word: **WARNING**

GHS Hazard Pictograms:



GHS Hazard Statements:

H361 - Suspected of damaging fertility or the unborn child

GHS Precautionary Statements:

- 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+313 - IF exposed or concerned: Get medical advice/attention.
- P405 - Store locked up.
- P501 - Dispose of contents/container to local regulations

3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

| Cas# | % | Chemical Name |
|------------|---|--------------------|
| 10043-35-3 | | Boric acid (H3B03) |

4 FIRST AID MEASURES

Inhalation: If inhaled, move person to fresh air. If not breathing, give artificial respiration. Consult a physician.

Skin Contact: Promptly flush skin with soap water until all chemical is removed.
Get medical attention if needed.

Eye Contact: Immediately flush eyes with large amounts of water for at least 15 minutes, lifting eyelids occasionally to facilitate

irrigation.

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

5 FIRE FIGHTING MEASURES

Extinguishing media
Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture
boron oxides

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

Further information
No data

6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental precautions:

Do not let product enter drains.

Personal precautions, protective equipment and emergency procedures:

Wear respiratory protection. Avoid dust formation. Avoid breathing dust, vapours, mist or gas. Ensure adequate ventilation.

7 HANDLING AND STORAGE

Handling Precautions: Avoid formation of dust and aerosols. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is formed.

Storage Requirements: Keep container tightly closed.
Store in cool/dry area.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal Protective Equipment: Boric acid (H3BO3) (10043-35-3) []

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 gloves 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.

Full contact: Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min
Material tested: Dermatril (KCL 740 / Aldrich Z677272, Size M)

Splash contact: Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min
Material tested: Dermatril (KCL 740 / Aldrich Z677272, Size M) data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the

CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

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.

Exposure Guidelines

Boric acid (H3BO3) (10043-35-3) [] : no data available

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PHYSICAL AND CHEMICAL PROPERTIES

| | |
|-------------------------------|-------------------------------------|
| Appearance: | White |
| Physical State: | Solid |
| Odor: | No data available |
| Odor Threshold: | No data available |
| Solubility: | No data available |
| Spec Grav./Density: | 1.44 |
| Viscosity: | No data available |
| Boiling Point: | 300 °C (572 °F) |
| Freezing/Melting Pt.: | 160 °C (320 °F) |
| Flash Point: | No data available |
| Partition Coefficient: | No data available |
| Vapor Pressure: | 3.5 hPa (2.6 mmHg) at 20 °C (68 °F) |
| Vapor Density: | No data available |
| pH: | No data available |
| Evap. Rate: | No data available |
| Auto-Ignition Temp: | No data available |
| Decomp Temp: | No data available |
| UFL/LFL: | No data available |

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STABILITY AND REACTIVITY

| | |
|---------------------------------|--|
| Reactivity: | No data available |
| Chemical Stability: | Stable under recommended storage conditions. |
| Conditions to Avoid: | Avoid moisture |
| Materials to Avoid: | Potassium, Acid anhydrides |
| Hazardous Decomposition: | No data available |

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TOXICOLOGICAL INFORMATION

Boric acid (H3BO3) (10043-35-3) []

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 sensitisation: no data available

Germ cell mutagenicity: 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.

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

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

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ECOLOGICAL INFORMATION

Boric acid (H₃BO₃) (10043-35-3) []

Information on ecological effects

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 LC₅₀ - *Daphnia magna* (Water flea) - 53.2 mg/l - 21 d.

other aquatic invertebrates

EC₅₀ - *Daphnia magna* (Water flea) - 133 mg/l - 48 h

Persistence and degradability: no data available

Bioaccumulative potential: no data available

Mobility in soil: no data available

Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects: no data available

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DISPOSAL CONSIDERATIONS

Dispose of in accordance with local regulations.

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TRANSPORT INFORMATION

Non D.O.T. regulated.

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REGULATORY INFORMATION

Component (CAS#) [%] - CODES

Boric acid (H3BO3) (10043-35-3) [n/a%] TSCA

Regulatory CODE Descriptions

TSCA = Toxic Substances Control Act

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OTHER INFORMATION

Disclaimer:

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