



Material Safety Data Sheet (MSDS)

Boric Acid Solution 4%

Section 1: Identification

Product Name: Boric Acid Solution 4%

Chemical Formula: $\text{H}_3\text{BO}_3 \cdot \text{H}_2\text{O}$

CAS Number: 10043-35-3

Manufacturer: HD Chemicals LTD

Address: 9 Scott Business Park, PL2 2PB Plymouth, United Kingdom

Section 2: Hazard Identification

Classification:

- Skin Corrosion/Irritation: Not classified
- Serious Eye Damage/Eye Irritation: Not classified
- Specific Target Organ Toxicity (Repeated Exposure): Category 2
- Acute Aquatic Toxicity: Category 1



Label Elements:

- Signal Word: Warning
- Hazard Statements:
 - May cause damage to organs through prolonged or repeated exposure.
 - Toxic to aquatic life.

Section 3: Composition/Information on Ingredients

Chemical Name: Boric Acid Chemical Formula: H_3BO_3 Concentration: 4%

Section 4: First Aid Measures

- Skin Contact: Wash affected area with soap and water. If irritation occurs, seek medical attention.
- Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention if irritation persists.
- Ingestion: Rinse mouth. Do not induce vomiting. Seek medical attention.
- Inhalation: Move the affected person to fresh air. If breathing difficulties persist, seek medical attention.

Section 5: Firefighting Measures

Extinguishing Media: Use water spray, foam, dry chemical, or carbon dioxide to extinguish fires involving this product.



Section 6: Accidental Release Measures

- Personal Precautions: Use appropriate personal protective equipment (PPE). Avoid contact with skin and eyes.
- Environmental Precautions: Prevent entry into drains, waterways, or soil. Notify the appropriate authorities if a significant spillage occurs.
- Cleanup Procedures: Absorb spills with an inert material and dispose of according to local regulations. Flush the area with water to remove any remaining residue.

Section 7: Handling and Storage

- Handling: Use with adequate ventilation. Avoid direct contact with skin, eyes, and clothing. Wash hands after handling.
- Storage: Store in a cool, dry place. Keep containers tightly closed.

Section 8: Exposure Controls/Personal Protection

- Engineering Controls: Use local exhaust ventilation if necessary to maintain airborne concentrations below recommended exposure limits.
- Personal Protective Equipment (PPE):
 - Eye/Face Protection: Safety goggles or glasses.
 - Skin Protection: Gloves, protective clothing.
 - Respiratory Protection: Not typically required. Use NIOSH-approved respiratory protection if needed.

Section 9: Physical and Chemical Properties

- Appearance: Clear liquid
- Odor: Odorless
- pH: 5.0-6.5 (4% solution)
- Melting Point: 169 °C (336 °F)
- Boiling Point: Decomposes
- Solubility in Water: Soluble

Section 10: Stability and Reactivity

- Stability: Stable under normal conditions.
- Incompatible Materials: Strong acids, strong bases, and reactive metals.
- Hazardous Decomposition Products: When heated to decomposition, boric acid may emit toxic fumes, including boron oxide and other irritating or toxic gases.

Section 11: Toxicological Information

- Serious Eye Damage/Eye Irritation: Not classified
- Sensitization: Not classified as a skin sensitizing agent.
- Chronic Effects/Carcinogenicity: Prolonged or repeated exposure may cause damage to organs.
- Reproductive Toxicity: May cause harm to fertility or the unborn child.
- Specific Target Organ Toxicity (Repeated Exposure): May cause damage to organs through prolonged or repeated exposure.

Section 12: Ecological Information

- Toxicity: Toxic to aquatic life.
- Persistence and Degradability: Boric acid is biodegradable.
- Bioaccumulation Potential: Low bioaccumulation potential.
- Mobility in Soil: Soluble in water and may leach into groundwater.
- Other Adverse Effects: None known.



Section 13: Disposal Considerations

- Disposal Methods: Dispose of in accordance with local regulations. Consult with appropriate waste management authorities for disposal instructions. Do not dispose of in drains or waterways.

Section 14: Transport Information

This product is not classified as hazardous for transportation under normal circumstances. However, it is always advisable to consult the latest transportation regulations specific to your region to ensure compliance with any applicable requirements.

Section 15: Regulatory Information

- Safety, Health, and Environmental Regulations: Follow applicable local, regional, and national regulations for the safe handling, storage, and disposal of this product.

Section 16: Other Information

- Revision Date: 15/06/2022
- Other Precautions: Handle and store the product in accordance with good industrial hygiene practices. This MSDS provides information on the safe handling, storage, and use of the product but does not replace any precautionary measures required by applicable laws or regulations.

This Material Safety Data Sheet (MSDS) is provided solely for informational purposes and represents the product's safety data based on the best knowledge available at the time of preparation. The manufacturer assumes no responsibility for injury, damage, or loss resulting from the use or reliance upon this information.