



# SAFETY DATA SHEET

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Revision Date: N/A

Revision Number: 1

**SECTION 1 Identification****1.1. Product Identifier**

Trade Name or Designation: Boric Acid 4% W/V

Product Number: APS15011

**1.2. Recommended Use and Restrictions on Use**

General Laboratory Reagent

**1.3. Details of the Supplier of the Safety Data Sheet****Dawn Scientific Inc**

121 Liberty Street, Metuchen, NJ, 08840

Tel : 732-902-6300 | Fax : 973-802-1005

sales@dawnscientific.com | www.dawnscientific.com

**1.4. Emergency Telephone Number (24 hours)**

CHEMTREC (USA) 800-424-9300

CHEMTREC (International) 1+ 703-527-3887

**SECTION 2: Hazard(s) identification****2.1. Classification of the substance or mixture****GHS-US classification**

Reproductive toxicity Category 1B H360

Full text of H statements : see section 16

**2.2. Label elements****GHS-US labeling**

Hazard pictograms (GHS-US)



GHS08

Signal word (GHS-US)

: Danger

Hazard statements (GHS-US)

: H360 - May damage fertility or the unborn child

Precautionary statements (GHS-US)

: P201 - Obtain special instructions before use  
P202 - Do not handle until all safety precautions have been read and understood  
P280 - Wear eye protection, protective gloves  
P308+P313 - IF exposed or concerned: Get medical advice/attention  
P405 - Store locked up  
P501 - Dispose of contents/container to comply with local, state and federal regulations

**2.3. Other hazards**

Other hazards not contributing to the classification

: None.

**2.4. Unknown acute toxicity (GHS US)**

Not applicable

**SECTION 3: Composition/Information on ingredients****3.1. Substance**

Not applicable

**3.2. Mixture**

Name	Product identifier	%
Water	(CAS No) 7732-18-5	95-96
Boric Acid	(CAS No) 10043-35-3	4-5

Full text of hazard classes and H-statements : see section 16

## **SECTION 4: First aid measures**

### **4.1. Description of first aid measures**

First-aid measures general	: Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	: Allow victim to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
First-aid measures after eye contact	: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

### **4.2. Most important symptoms and effects, both acute and delayed**

Symptoms/injuries	: May damage fertility or the unborn child.
Symptoms/injuries after inhalation	: May cause respiratory irritation.
Symptoms/injuries after skin contact	: Slight irritation.
Symptoms/injuries after eye contact	: May cause slight irritation.
Symptoms/injuries after ingestion	: Nausea. Vomiting.
Symptoms/injuries upon intravenous administration	: Not available.
Chronic symptoms	: Affection of the renal tissue. Change in the haemogramme/blood composition.

### **4.3. Indication of any immediate medical attention and special treatment needed**

Obtain medical assistance. Treat symptomatically.

## **SECTION 5: Firefighting measures**

### **5.1. Extinguishing media**

Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.

### **5.2. Special hazards arising from the substance or mixture**

Fire hazard	: Not flammable.
Explosion hazard	: Not applicable.
Reactivity	: None.

### **5.3. Advice for firefighters**

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.
Other information	: Not applicable.

## **SECTION 6: Accidental release measures**

### **6.1. Personal precautions, protective equipment and emergency procedures**

General measures	: Isolate from fire, if possible, without unnecessary risk.
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#### **6.1.1. For non-emergency personnel**

Protective equipment	: Safety glasses. Gloves.
Emergency procedures	: Evacuate unnecessary personnel.

#### **6.1.2. For emergency responders**

Protective equipment	: Equip cleanup crew with proper protection.
Emergency procedures	: Ventilate area.

### **6.2. Environmental precautions**

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

### **6.3. Methods and material for containment and cleaning up**

Methods for cleaning up	: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.
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#### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use.

Hygiene measures : Wash exposed skin thoroughly after handling.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container closed when not in use.

Incompatible products : Strong bases.

Incompatible materials : Sources of ignition. Direct sunlight.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

Boric Acid (10043-35-3)		
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
ACGIH	ACGIH Ceiling (mg/m <sup>3</sup> )	6 mg/m <sup>3</sup>
Water (7732-18-5)		
Not applicable		

#### 8.2. Exposure controls

Appropriate engineering controls : Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

Personal protective equipment : Safety glasses. Gloves.



Hand protection : Wear protective gloves.

Eye protection : Chemical goggles or safety glasses.

Respiratory protection : Respiratory protection not required in normal conditions.

Other information : Do not eat, drink or smoke during use.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : Clear, colorless liquid.

Color : Colorless

Odor : None.

Odor threshold : No data available

pH : No data available

Melting point : No data available

Freezing point : No data available

Boiling point : No data available

Flash point : No data available

Relative evaporation rate (butyl acetate=1) : No data available

Flammability (solid, gas) : Non flammable.

Vapor pressure : No data available

Relative vapor density at 20 °C : No data available

Relative density	: No data available
Specific gravity / density	: 1 g/ml
Solubility	: Soluble in water.
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: Not applicable.
Oxidizing properties	: None.

## 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

None.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Not established.

### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

### 10.5. Incompatible materials

Strong bases.

### 10.6. Hazardous decomposition products

boron.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Likely routes of exposure : Skin and eye contact

Acute toxicity : Not classified

Boric Acid (10043-35-3)	
LD50 oral rat	2660 mg/kg
LD50 dermal rabbit	2000 mg/kg
Water (7732-18-5)	
LD50 oral rat	≥ 90000 mg/kg
ATE US (oral)	90000.000 mg/kg body weight

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
	Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified
Reproductive toxicity	: May damage fertility or the unborn child.
	Based on available data, the classification criteria are not met
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified

Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation	: May cause respiratory irritation.
Symptoms/injuries after skin contact	: Slight irritation.
Symptoms/injuries after eye contact	: May cause slight irritation.
Symptoms/injuries after ingestion	: Nausea. Vomiting.
Symptoms/injuries upon intravenous administration	: Not available.
Chronic symptoms	: Affection of the renal tissue. Change in the haemogramme/blood composition.

## SECTION 12: Ecological information

### 12.1. Toxicity

Boric Acid (10043-35-3)	
LC50 fish 1	5600 mg/l Gambusia affinis
EC50 Daphnia 1	115 mg/l
EC50 Daphnia 2	658 - 875 mg/l

### 12.2. Persistence and degradability

Boric Acid, 2% w/v	
Persistence and degradability	Not established.
Boric Acid (10043-35-3)	
Persistence and degradability	Not established.
Water (7732-18-5)	
Persistence and degradability	Not established.

### 12.3. Bioaccumulative potential

Boric Acid, 2% w/v	
Bioaccumulative potential	Not established.
Boric Acid (10043-35-3)	
Log Pow	-0.757
Bioaccumulative potential	Not established.
Water (7732-18-5)	
Bioaccumulative potential	Not established.

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

Effect on the global warming	: No known effects from this product.
GWPmix comment	: No known effects from this product.
Other information	: Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to comply with local, state and federal regulations.
Ecology - waste materials	: Avoid release to the environment.

## SECTION 14: Transport information

### Department of Transportation (DOT)

In accordance with DOT  
Not regulated

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

Boric Acid, 2% w/v	
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory  
This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

### 15.2. International regulations

#### CANADA

Boric Acid, 2% w/v	
WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects
Boric Acid (10043-35-3)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects
Water (7732-18-5)	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria

#### EU-Regulations

No additional information available

#### National regulations

Boric Acid (10043-35-3)	
Listed on the Canadian IDL (Ingredient Disclosure List)	

### 15.3. US State regulations

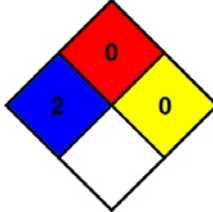
California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

## SECTION 16: Other information

Other information : None.

Full text of H-phrases: see section 16:

H360	May damage fertility or the unborn child
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NFPA health hazard	: 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.	
NFPA fire hazard	: 0 - Materials that will not burn.	
NFPA reactivity	: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.	
HMIS III Rating	: 2 Moderate Hazard - Temporary or minor injury may occur	
Health	: 0 Minimal Hazard - Materials that will not burn	
Flammability	: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.	
Physical	: C - Safety glasses, Gloves, Synthetic apron	
Personal protection		

Last Revision Date: 01/01/2019

## DISCLAIMER

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and Dawn Scientific Inc assumes no legal responsibility or liability whatsoever resulting from its use.