



# SAFETY DATA SHEET

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Preparation Date: 01/01/2019

Revision Date: N/A

Revision Number: 1

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

Trade Name or Designation: Buffer Solution pH 9.18

Product Number: B16033`

**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

**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 protective gloves, eye protection  
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. Substances**

Not applicable

**3.2. Mixtures**

Name	Product identifier	%
Water	(CAS No) 7732-18-5	99.62
Sodium Tetraborate, Decahydrate	(CAS No) 1303-96-4	0.38

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

No additional information available

## **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**

No additional information available

### **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.

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

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

#### **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 contaminated clothing before reuse.

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

Storage conditions	: Keep container closed when not in use.
Incompatible products	: Strong oxidizers. Strong acids.

Incompatible materials : incompatible materials. Heat sources.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Sodium Tetraborate, Decahydrate (1303-96-4)		
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
ACGIH	ACGIH STEL (mg/m <sup>3</sup> )	6 mg/m <sup>3</sup>
NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	5 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. Provide adequate general and local exhaust ventilation.

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
Color	: Colorless
Odor	: characteristic
Odor threshold	: No data available
pH	: 9.18
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
Solubility	: No data available
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	: No data available
Oxidizing properties	: No data available

### 9.2. Other information

Percent Solids : 0 %

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Not established.

### 10.4. Conditions to avoid

Incompatible materials. Extremely high or low temperatures.

### 10.5. Incompatible materials

Strong acids. Strong oxidizers.

### 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

Sodium Tetraborate, Decahydrate (1303-96-4)	
LD50 oral rat	2660 mg/kg
LD50 dermal rabbit	10000 mg/kg
ATE US (oral)	2660.000 mg/kg body weight
ATE US (dermal)	10000.000 mg/kg body weight
Water (7732-18-5)	
LD50 oral rat	≥ 90000 mg/kg
ATE US (oral)	90000.000 mg/kg body weight

Skin corrosion/irritation : Not classified  
pH: 9.18

Serious eye damage/irritation : Not classified  
pH: 9.18

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : May damage fertility or the unborn child.

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.

## SECTION 12: Ecological information

### 12.1. Toxicity

Sodium Tetraborate, Decahydrate (1303-96-4)	
EC50 Daphnia 1	1085 mg/l

### 12.2. Persistence and degradability

Buffer Solution pH 9.18	
Persistence and degradability	Not established.

Sodium Tetraborate, Decahydrate (1303-96-4)	
Persistence and degradability	Not established.

Water (7732-18-5)	
Persistence and degradability	Not established.

### 12.3. Bioaccumulative potential

Buffer Solution pH 9.18	
Bioaccumulative potential	Not established.

Sodium Tetraborate, Decahydrate (1303-96-4)	
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 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

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

Buffer Solution pH 9.18	
WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects

Sodium Tetraborate, Decahydrate (1303-96-4)	
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

**Sodium Tetraborate, Decahydrate (1303-96-4)**

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.

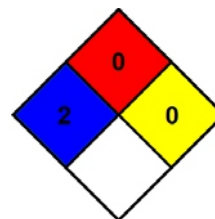
Full text of H-phrases: see section 16:

-----	H360	May damage fertility or the unborn child
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NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA fire hazard : 0 - Materials that will not burn under typical dire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



HMIS III Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 0 Minimal Hazard - Materials that will not burn

Physical : 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.

Personal protection : B - Safety glasses, Gloves

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.