

## SECTION 1: IDENTIFICATION

### 1.1. Product Identifier

**Product Form:** Mixture

**Product Name:** Buffer Solution pH 9.18

**Part Number:** 9210014

### 1.2. Intended Use of the Product

**Use of the Substance/Mixture:** No use specified

### 1.3. Name, Address, and Telephone of the Responsible Party

#### Company

Rosemount Analytical Inc.

2400 Barranca Parkway

Irvine, CA 92606

USA

949-757-8500

### 1.4. Emergency Telephone Number

**Emergency Number :** 949-757-8500

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the Substance or Mixture

**Classification (GHS-US)**

Repr. 1B H360

Full text of H-phrases: 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 clothing, protective gloves.

P308+P313 - If exposed or concerned: Get medical advice/attention.

P405 - Store locked up.

P501 - Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

### 2.3. Other Hazards

Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

### 2.4. Unknown Acute Toxicity (GHS-US) No data available

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substances

Not applicable

### 3.2. Mixture

Name	Product Identifier	% (w/w)	Classification (GHS-US)
Water	(CAS No) 7732-18-5	60-100	Not classified
Sodium tetraborate decahydrate	(CAS No) 1303-96-4	< 0.1, 0.1-1.5	Eye Irrit. 2A, H319 Repr. 1B, H360

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More than one of the ranges of concentration prescribed by Controlled Products Regulations has been used where necessary, due to varying composition.

Full text of H-phrases: see section 16

### SECTION 4: FIRST AID MEASURES

#### 4.1. Description of First Aid Measures

**General:** Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention.

**Inhalation:** When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

**Skin Contact:** Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation persists.

**Eye Contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.

**Ingestion:** Rinse mouth. Do NOT induce vomiting. Get medical advice and attention if you feel unwell.

#### 4.2. Most Important Symptoms and Effects Both Acute and Delayed

**General:** May damage fertility or the unborn child.

**Inhalation:** May cause respiratory irritation.

**Skin Contact:** May cause skin irritation.

**Eye Contact:** May cause eye irritation.

**Ingestion:** Ingestion is likely to be harmful or have adverse effects.

**Chronic Symptoms:** May damage fertility or the unborn child.

#### 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

### SECTION 5: FIRE-FIGHTING MEASURES

#### 5.1. Extinguishing Media

**Suitable Extinguishing Media:** Does not burn. Use extinguishing media appropriate for surrounding fire.

**Unsuitable Extinguishing Media:** None known.

#### 5.2. Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Not flammable.

**Explosion Hazard:** Product is not explosive.

**Reactivity:** Hazardous reactions will not occur under normal conditions.

#### 5.3. Advice for Firefighters

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire.

**Firefighting Instructions:** Do not allow run-off from fire fighting to enter drains or water sources. Do not breathe fumes from fires or vapours from decomposition.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

**Hazardous Combustion Products:** Oxides of boron. Sodium oxides.

#### Reference to Other Sections

Refer to section 9 for flammability properties.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

#### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Do not get in eyes, on skin, or on clothing. Avoid breathing vapor, mist, or spray.

##### 6.1.1. For Non-Emergency Personnel

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel.

##### 6.1.2. For Emergency Personnel

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** Ventilate area.

#### 6.2. Environmental Precautions

Prevent entry to sewers and public waters.

#### 6.3. Methods and Material for Containment and Cleaning Up

**For Containment:** Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

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**Methods for Cleaning Up:** Clear up spills immediately and dispose of waste safely. Spills should be contained with mechanical barriers. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

### 6.4. Reference to Other Sections

Concerning disposal elimination after cleaning, see item 13. See heading 8, Exposure Controls and Personal Protection.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for Safe Handling

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

**Storage Conditions:** Store in a dry, cool and well-ventilated place. Keep container closed when not in use.

**Incompatible Materials:** Strong acids. Strong bases. Strong oxidizers.

### 7.3. Specific End Use(s)

No use specified

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

Sodium tetraborate decahydrate (1303-96-4)		
Mexico	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (inhalable fraction)
USA ACGIH	ACGIH STEL (mg/m <sup>3</sup> )	6 mg/m <sup>3</sup> (inhalable fraction)
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Alberta	OEL STEL (ppm)	3 ppm
Alberta	OEL TWA (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
British Columbia	OEL STEL (mg/m <sup>3</sup> )	6 mg/m <sup>3</sup> (inhalable)
British Columbia	OEL TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (inhalable)
Manitoba	OEL STEL (mg/m <sup>3</sup> )	6 mg/m <sup>3</sup> (inhalable fraction)
Manitoba	OEL TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (inhalable fraction)
New Brunswick	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Newfoundland & Labrador	OEL STEL (mg/m <sup>3</sup> )	6 mg/m <sup>3</sup> (inhalable fraction)
Newfoundland & Labrador	OEL TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (inhalable fraction)
Nova Scotia	OEL STEL (mg/m <sup>3</sup> )	6 mg/m <sup>3</sup> (inhalable fraction)
Nova Scotia	OEL TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (inhalable fraction)
Nunavut	OEL STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Nunavut	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Northwest Territories	OEL STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Northwest Territories	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Ontario	OEL STEL (mg/m <sup>3</sup> )	6 mg/m <sup>3</sup> (inhalable)
Ontario	OEL TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (inhalable)
Prince Edward Island	OEL STEL (mg/m <sup>3</sup> )	6 mg/m <sup>3</sup> (inhalable fraction)
Prince Edward Island	OEL TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (inhalable fraction)
Québec	VEMP (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Saskatchewan	OEL STEL (mg/m <sup>3</sup> )	6 mg/m <sup>3</sup> (inhalable fraction)
Saskatchewan	OEL TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (inhalable fraction)

### 8.2. Exposure Controls

**Appropriate Engineering Controls:** Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed. Maintain sufficient mechanical or natural ventilation to assure concentrations remain below PEL/TLV. Use local exhaust if necessary. Power equipment should be equipped with properly designed dust collection devices.

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**Personal Protective Equipment:** Protective goggles. Gloves. Protective clothing.



**Materials for Protective Clothing:** Chemically resistant materials and fabrics.

**Hand Protection:** Wear chemically resistant protective gloves.

**Eye Protection:** Chemical goggles or safety glasses.

**Skin and Body Protection:** Wear suitable protective clothing.

**Respiratory Protection:** If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protection should be worn.

**Environmental Exposure Controls:** Avoid release to the environment.

**Other Information:** When using, do not eat, drink or smoke.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: Colorless liquid
Odor	: Odorless
Odor Threshold	: Not available
pH	: 9.18
Evaporation Rate	: Not available
Melting Point	: Not available
Freezing Point	: Not available
Boiling Point	: 100 - 101 °C (212 - 214 °F)
Flash Point	: Non-flammable
Auto-ignition Temperature	: Not available
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not available
Lower Flammable Limit	: Not available
Upper Flammable Limit	: Not available
Vapor Pressure	: Not available
Relative Vapor Density at 20 °C	: Not available
Specific Gravity	: 1.01
Solubility	: Soluble
Partition Coefficient: N-Octanol/Water	: Not available
Viscosity	: Not available
Explosion Data – Sensitivity to Mechanical Impact	: Not expected to present an explosion hazard due to mechanical impact.
Explosion Data – Sensitivity to Static Discharge	: Not expected to present an explosion hazard due to static discharge.

## SECTION 10: STABILITY AND REACTIVITY

- 10.1. Reactivity:** Hazardous reactions will not occur under normal conditions.
- 10.2. Chemical Stability:** Stable under normal ambient conditions.
- 10.3. Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.
- 10.4. Conditions to Avoid:** Direct sunlight. Extremely high or low temperatures.
- 10.5. Incompatible Materials:** Strong acids. Strong bases. Strong oxidizers.
- 10.6. Hazardous Decomposition Products:** Thermal decomposition generates: Oxides of boron. Sodium oxides.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on Toxicological Effects - Product

**Acute Toxicity:** Not classified

**LD50 and LC50 Data:** Not available

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**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

**Teratogenicity:** Not available

**Carcinogenicity:** Not classified

**Specific Target Organ Toxicity (Repeated Exposure):** Not classified

**Reproductive Toxicity:** May damage fertility or the unborn child.

**Specific Target Organ Toxicity (Single Exposure):** Not classified

**Aspiration Hazard:** Not classified

**Symptoms/Injuries After Inhalation:** May cause respiratory irritation.

**Symptoms/Injuries After Skin Contact:** May cause skin irritation.

**Symptoms/Injuries After Eye Contact:** May cause eye irritation.

**Symptoms/Injuries After Ingestion:** Ingestion is likely to be harmful or have adverse effects.

**Chronic Symptoms:** May damage fertility or the unborn child.

### 11.2. Information on Toxicological Effects - Ingredient(s)

**LD50 and LC50 Data:**

Sodium tetraborate decahydrate (1303-96-4)	
LD50 Oral Rat	3493 mg/kg
LD50 Dermal Rabbit	> 10000 mg/kg

## SECTION 12: ECOLOGICAL INFORMATION

**12.1. Toxicity** No additional information available

### 12.2. Persistence and Degradability

Buffer Solution pH 9.18	
Persistence and Degradability	Not established.

### 12.3. Bioaccumulative Potential

Buffer Solution pH 9.18	
Bioaccumulative Potential	Not established.

**12.4. Mobility in Soil** Not available

### 12.5. Other Adverse Effects

**Other Information:** Avoid release to the environment.

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

**Sewage Disposal Recommendations:** Do not empty into drains. Do not dispose of waste into sewer.

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

## SECTION 14: TRANSPORT INFORMATION

**14.1. In Accordance with DOT** Not regulated for transport

**14.2. In Accordance with IMDG** Not regulated for transport

**14.3. In Accordance with IATA** Not regulated for transport

**14.4. In Accordance with TDG** Not regulated for transport

## SECTION 15: REGULATORY INFORMATION

### 15.1. US Federal Regulations

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SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard

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<b>Water (7732-18-5)</b>
Listed on the United States TSCA (Toxic Substances Control Act) inventory
<b>Sodium tetraborate decahydrate (1303-96-4)</b>
Listed on the United States TSCA (Toxic Substances Control Act) inventory

### 15.2. US State Regulations

<b>Sodium tetraborate decahydrate (1303-96-4)</b>
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

### 15.3. Canadian Regulations

<b>Buffer Solution pH 9.18</b>	
WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects
	

<b>Water (7732-18-5)</b>	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria
<b>Sodium tetraborate decahydrate (1303-96-4)</b>	
Listed on the Canadian DSL (Domestic Substances List)	
Listed on the Canadian IDL (Ingredient Disclosure List)	
IDL Concentration 1 %	
WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

## SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

**Revision Date** : 04/13/2015  
**Other Information** : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

### GHS Full Text Phrases:

Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Repr. 1B	Reproductive toxicity Category 1B
H319	Causes serious eye irritation
H360	May damage fertility or the unborn child

### Party Responsible for the Preparation of This Document

Rosemount Analytical Inc. 2400 Barranca Parkway Irvine, CA 92606 (Tel: 949-757-8500)

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*

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