



Manufacturers of Instruments for  
pH, Redox, Specific Ions,  
Conductivity, Salinity,  
Dissolved Oxygen,  
Humidity, Temperature,  
for Research and Industry



**Manufacturer** : Australian Chemical Reagents  
A Division of Roache Analysts Pty Ltd  
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## MATERIAL SAFETY DATA SHEET

Not Classified as Hazardous According to Criteria of Worksafe Australia

### IDENTIFICATION

#### pH9.18 Buffer

Part No	Product Code	Description & Volume
121385	GB9.2	pH9.18 Buffer, 200mL
121386	GB9.2L	pH9.18 Buffer, 1 Litre

This MSDS also applies to other volumes of this buffer, labelled as custom standard.

**UN Number** : None Allocated  
**Other Names** : Nil  
**Manufacturers Code** : GC9.18

**Dangerous Goods Class** : None Allocated  
**Subsidiary Risk** : None Allocated  
**Hazchem Code** : None Allocated  
**Poisons Schedule** : Not Scheduled

**Uses** : Analytical Reagents for calibrating pH meters.

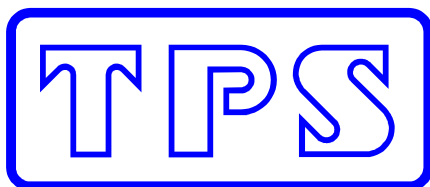
#### Physical Description / Properties :

**Appearance** : Turquoise liquid  
**Boiling Point (°C)** : 100 (approx)  
**Vapour Pressure (mm of Hg @ 25°C)** : 25 (approx)  
**Specific Gravity** : 1  
**Flash Point (°C)** : Not flammable  
**Flammability Limits (%)** : Not flammable  
**Solubility in Water (g/L)** : Completely miscible

#### Other Properties :

#### Ingredients :

Chemical Entity	CAS No	Proportion
Sodium Tetraborate	[ 1330-43-4 ]	2%
Water	[ 7732-18-5 ]	to 100%



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## HEALTH HAZARD INFORMATION

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### Health Effects :

#### **Swallowed**

: May cause irritation of the gastric system. Ingestion of large quantities may cause severe vomiting, diarrhoea, shock or death. For borax LD<sub>50</sub> : oral infant 1000mg/kg ,oral man 709mg/kg , LD50 oral rat 2660mg/kg

#### **Eye**

: May be irritating to eye tissue.

#### **Skin**

: May irritate skin tissue. May be harmful by skin absorption.

#### **Inhaled**

: Not considered a hazard with normal laboratory use. Mists may cause irritation of mucous membranes.

#### **Chronic Effects**

: No data available.

### First Aid :

#### **Swallowed**

: If conscious wash out mouth with water. Induce vomiting with Ipecac Syrup. Seek medical advice. Show this MSDS to medical practitioner.

#### **Eye**

: Immediately hold eyelids open and flood with water for at least 15 minutes. Obtain medical aid. Show this MSDS to medical practitioner.

#### **Skin**

: Remove contaminated clothing. Immediately wash skin thoroughly with water and mild soap. Seek medical advice if irritation persists. Show this MSDS to medical practitioner.

Launder clothing before reuse.

#### **Inhaled**

: Remove from contaminated air. Maintain breathing with artificial respiration if necessary. Seek medical assistance. Show this MSDS to a doctor.

### Advice to Doctor :

Treat symptomatically

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## PRECAUTIONS FOR USE

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#### **Exposure Limits**

: Worksafe Australia - Borates, tetra, sodium salts (decahydrate) - 5mg/m<sup>3</sup> TWA

#### **Engineering Controls**

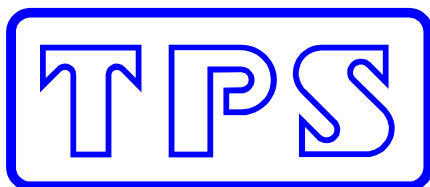
: Not usually required with normal use. If mists or aerosols generated, maintain atmospheric concentrations below exposure limit with extraction ventilation.

#### **Personal Protection**

: Wear protective clothing including safety glasses and rubber or PVC gloves.

#### **Flammability**

: Not flammable.



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## SAFE HANDLING INFORMATION

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**Storage & Transport** : Store sealed in original container in a cool well ventilated situation away from foods and other chemicals. Observe good hygiene and housekeeping practices.

No special transport requirements apply.

**Spills & Disposal** : Absorb spills with sand or vermiculite. Transfer carefully to disposal container. Dispose of in accordance with local regulations.

**Fire/Explosion Hazard** : Fire fighters should wear self contained breathing apparatus and impervious clothing if exposure to fumes is likely. Use water spray, foam or dry chemical to control fire situation if compatible with other chemical products in the vicinity.

**Other :**

References :

Lenga, R.E. (Ed.) *Safety The Sigma Aldrich Library of Chemical Safety Data* Sigma Aldrich Corporation 1985

National Institute for Occupational Safety & Health *NIOSH Pocket Guide to Chemical Hazards* 1990.

Merck & Co Inc. *The Merck Index 11th Ed.* Merck & Co 1989.

International Labour Office *Encyclopaedia of Occupational Health & Safety* Vol 1 & 2 International Labour Office 1983

National Occupational Health & Safety Commission *Exposure Standards for Atmospheric Contaminants in the Occupational Environment* AGPS 1995

National Occupational Health & Safety Commission *List of Designated Hazardous Substances* [NOHSC:10005(1994)] AGPS 1994

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