

**Material Safety data sheet**  
**(pHBS10)**  
**pH Buffer Solution 10.0pH**

Version number 1.2 - 2014

<b>1 – Identification of the substance</b>	
Use of the substance / preparation	Buffer Solution For pH Calibration, traceable to NIST coloured Blue.
Chemical Characteristics	Aqueous Solution containing inorganic components.
Product Code	pHBS10
Supplier	Automated Water & Effluent LTD. AWE House, Antom Court, Tollgate Industrial Estate, Beaconsfield, Stafford, ST16 3AF Tel:- 01785 254 597 Fax:- 01785 257 724 Email:- sales@awe-ltd.co.uk

<b>2 – Composition / Information on ingredients.</b>	
Hazardous Components	Sodium Bicarbonate in aqueous solution CAS 144-55-8 < 5% Sodium Carbonate in aqueous solution CAS 7558-79-4 - < 5 % T+ N 28 34 48/24/25 50/53 Water CAS 7732-18-5 – Remainder.

<b>3 – Hazards Identification.</b>	
<p>Potential Health Effects</p> <p><b>Inhalation:</b></p> <p><b>Skin:</b></p> <p><b>Eye:</b></p> <p><b>Ingestion:</b></p>	<p>Harmful if inhaled May cause skin irritation. May be harmful if absorbed through the skin.</p> <p>Causes serious eye damage. May cause irritation of the digestive tract. May be harmful if swallowed.</p>

<b>4 – First Aid Measures</b>
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Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, give oxygen. Get medical attention if necessary.
Skin Contact	Wash affected areas thoroughly with soap and water for at least 15 minutes. Get medical attention if necessary.
Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes, remove contact lenses if present and easy to do so. Persist washing of eyes until eye irritation ceases. Get medical advice / attention.
Ingestion	Drink plenty of water. Do not induce vomiting without medical advice. Get medical attention if necessary.

### **5 – Fire Fighting Measures**

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. No unsuitable materials
Specific Hazards	The product is not flammable.

### **6 – Accidental Release Measures**

Personal Precautions	Use personal protective equipment as required. Keep unnecessary people away, isolate hazard area and deny entry. Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel only.
Environmental Precautions	Do not allow to enter sewers/ surface or ground water.
Methods for cleaning up	Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container.

### **7 – Handling & Storage**

Handling	Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes.
Storage	Keep away from children. Store in a cool, dry place. Store in a tightly closed container.

### **8 – Exposure Controls / Personal Protection**

Exposure Limits	CAS 7778-77-00; CAS 7558-79-4; CAS 7732-18-5; CAS# 7487-94-7:
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	<p>Belgium TWA: ( mercury inorganic compounds): 0.025 mg/m<sup>3</sup> VLE (as Hg) France VME: ( mercury inorganic compounds): 0.1 mg/m<sup>3</sup> VME (as Hg)</p> <p>Germany: ( mercury inorganic compounds): 0.1 mg/m<sup>3</sup> VME (as Hg) Germany: ( mercury inorganic compounds): skin notation</p> <p>Malaysia: ( mercury inorganic compounds): 0.025 mg/m<sup>3</sup> TWA (as Hg)</p> <p>Netherlands: ( mercury inorganic compounds): 0.15 mg/m<sup>3</sup> STEL Netherlands: ( mercury inorganic compounds): 0.05 mg/m<sup>3</sup> MAC</p> <p>Russia: ( mercury inorganic compounds): 0.005 mg/m<sup>3</sup> TWA (aerosol, as Hg) Spain: ( mercury inorganic compounds): 0.025 mg/m<sup>3</sup> VLAED (as Hg)</p>
Engineering methods to reduce exposure	<p>Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.</p> <p>Respiratory protection: Use adequate ventilation to keep airborne concentrations low.</p>
<p>Personal Protection equipment / Respiratory protection</p> <p><b>Eyes:</b></p> <p><b>Skin:</b></p> <p><b>Clothing:</b></p> <p><b>Respirators:</b></p>	<p>Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133. Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with, contact lenses.</p> <p>Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact.</p> <p>Handle in accordance with good industrial hygiene and safety practice. Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment. Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.</p> <p>Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.</p>

**9 – Physical and Chemical Properties**

Form	Liquid
Colour	Blue
Physical	At 25°C pH: 9.0 Boiling point / range ~ 100°C Relative Density ~ 1.0 Kg / L Flash point ~ Does not ignite Water Solubility ~ Completely miscible.

**10 – Stability and Reactivity**

Stability	No decomposition if stored and applied as directed.
Conditions to avoid	Has not been reported
Hazardous decomposition products	Irritant and Toxic Gas

**11 – Toxicological Information**

Acute Toxicity	Irritant to skin and mucous membranes.
	Irritating effect on eyes.
	No sensitization effects known.
Local Effects	No Data is available on this product itself
Long term toxicity	None
Further Information	The product shows the following dangers according to the calculation method of the general EU classification guidelines for preparations as issued in the latest version:- Irritant.

**12 – Ecological Information**

Persistence / degradability	Not available
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**13 – Disposal Considerations**

Waste from residues / unused products	Dispose of in accordance with local regulations.
Contaminated Packaging	Must not be disposed together with household waste. Do not allow product to reach sewage system.

**14 – Transport Information Considerations**

Further information IATA . IMO / RID / ADR	Not regulated as a hazardous material
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**15 – Regulatory Information**

## Regulatory Information

**PHBS10**

European Labelling in Accordance with EC Directives Hazard Symbols: Not available

Risk Phrases:

International Inventories

Not determined

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

US Federal Regulations

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

US State Regulations California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations.

16 – Other Information	
Recommended use	For industrial application only.
End Use	<ul style="list-style-type: none"><li>• <b>Text for Rphrases from Section 2</b></li><li>• R 28 Very toxic if swallowed. R 34 Causes burns. R 48/24/25 Toxic : danger of serious damage to health by prolonged exposure in contact with skin and if swallowed. R 50/53 Very toxic to aquatic organisms, may cause longterm adverse effects in the aquatic environment.</li></ul>

*The information above is believed to be accurate and represents the best information currently available to us. We make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages*