

**Material Safety data sheet
(RBS616mV)
Redox Buffer Solution 616mV**




Version number 1.2 – 2025

Revision Date 03/04/2025

1 – Identification of the substance	
Use of the substance / preparation	Buffer Solution For Redox Calibration
Chemical Characteristics	Aqueous Solution containing inorganic components.
Product Code	RBS616mV
Supplier	Automated Water & Effluent Ltd AWE House Antom Court Tollgate Drive Beaconside Stafford ST16 3AF Tel: 01785 254 597 Email: sales@awe-ltd.co.uk
Medical Advice: NPIS Emergency Phone (UK): Emergency (Northern Ireland): Emergency Republic of Ireland:	National Poisons Information Service www.npis.org Tel. 111 (UK) Please contact your local GP Out of hours: www.gpoutofhours.hscni.net Tel. National Poisons Information Centre on 01 809 2166

2 – Hazards Identification.	
	None NFPA Ratings (Scale 0 – 4): Health = 2 Flammability = 0 and Reactivity = 0 Special = 0 HMIS Ratings (Scale: 0=Minimal, 1=Slight, 2=Moderate, 3=Serious, 4=Severe) Health = 2 Flammability = 0 and Reactivity=1 Prot. Equipment=B (Tightly Sealed Goggles) (Nitrile Gloves or similar) In case of brief exposure or low pollution use respiratory filter device. WHMIS No Hazard Class

3 – Hazards Composition / Information on ingredients.

Hazardous Components / CLPEU Labelling		Hazard statements according to EC directive EU CLP Regulation (EC) No 1272/2008 (CLP), (EU) 2020/878 amendment to 1907/2006/EC, Article 31 REACH, covering:	
		CAS: 7664-93-9	Sulphuric Acid C R35
		EC	
		EINECS: 231-639-5	2.5-10%
			Skin Corr. 1A, H314
		CAS: 7705-08-0	Iron TrichlorideXn
		EC	R22; Xi R38-41
		EINECS: 231-729-4	2.5-10%
			Eye Dam. 1, H318;
			Acute Tox. 4, H302;
			Skin Irrit. 2, H315
Signal Word: Danger			

4 – First Aid Measures

Inhalation	In case of unconsciousness, place patient stably in side position for transportation.
Skin Contact	Remove contaminated clothing and rinse skin thoroughly with water. Get medical attention if any discomfort continues.
<p>Eye Contact</p> <p>Precautionary Statement: P305+P351+P338</p>	Promptly wash eyes with plenty of water for up to 15 minutes. Open eyes wide apart and rinse well to remove any contact lenses. Do not remove contact lenses by hand. Continue to rinse. If symptoms persist, consult a doctor.
Ingestion	Do not induce vomiting; call for medical help immediately. Rinse mouth thoroughly with water and give large amounts of water to drink. Never give anything by mouth to an unconscious person.

5 – Fire Fighting Measures

Suitable Extinguishing Media	CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Specific Hazards	The product is not flammable.

6 – Accidental Release Measures

Personal Precautions	<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>In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.</p> <p>The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.</p> <p>Wear tightly sealed goggles.</p>
Environmental Precautions	<p>Dilute with plenty of water.</p> <p>Do not allow to enter sewers/ surface or ground water.</p>
Methods for cleaning up	<p>Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).</p>

7 – Handling & Storage

Handling	<p>Ensure good ventilation/exhaustion at the workplace. Never carry bottle by the lid.</p> <p>Prevent formation of aerosols.</p>
Storage	<p>Keep away from children.</p> <p>Store at room temperature in original container.</p> <p>Keep receptacle tightly sealed and away from direct sunlight.</p>

8 – Exposure Controls / Personal Protection

Exposure Limits	Not available.
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:</p>
Personal Protection equipment / Respiratory protection	<p>In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.</p> <p>Wear tightly sealed goggles.</p> <p>Selection of protective gloves must include consideration of the penetration times along with rates of diffusion and degradation. The selected glove should comply with the specifications of EU Directive (EU) 2016/425 / (EU) 2023/941 and the standard EN 16523-1.</p>

9 – Physical and Chemical Properties	
Form	Liquid
Colour	As specified.
Physical	pH: N/A. Boiling point / range ~ 100°C Relative Density ~ 1.1566 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	Extremes of temperature and sunlight.
Hazardous decomposition products	None.

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	Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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

14 – Transport Information Considerations	
Further information	1760 CORROSIVE LIQUID, N.O.S. (SULPHURIC ACID, FERRIC CHLORIDE) *IMDG, IATA CORROSIVE LIQUID, N.O.S. (SULPHURIC ACID, FERRIC CHLORIDE)

15 – Regulatory Information	
Regulatory Information	<p>Redox buffer 616 mV:</p> <p>Safety, health and environmental regulations/legislation specific for the substance or mixture</p> <p>*National regulations:</p> <p>*Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water. *15.2</p> <p>Chemical safety assessment:</p> <p>A Chemical Safety Assessment has not been carried out.</p>

16 – Other Information	
Recommended use	For industrial application only.
	<ul style="list-style-type: none"> • H302 Harmful if swallowed. • H314 Causes severe skin burns and eye damage. • H315 Causes skin irritation. • H318 Causes serious eye damage. • H319 Causes serious eye irritation. • R22 Harmful if swallowed. • R35 Causes severe burns. • R38 Irritating to skin. • R41 Risk of serious damage to eyes.

The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication, however, no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials. Automated Water & Effluent Ltd., AWE Instruments and AWE Direct, or any other subsidiary will not be held liable for any damage or injury caused by this product and does not obviate the requirement for end users to carry out their own workplace and specific use risk assessment.