Material Safety data sheet
(RBS468)
Redox Buffer Solution 468mV
Version number 1.2-2014

| 1 - Identification of the substance | Buffer Solution For Redox Calibration |
| :--- | :--- |
| Use of the substance / preparation | Aqueous Solution containing inorganic <br> components. |
| Chemical Characteristics | RBS468mV |
| Product Code | Automated Water \& Effluent LTD. |
| Aupplier | AWE House, |
|  | Antom Court, |
|  | Tollgate Industrial Estate, |
|  | Beaconside, |
|  | Stafford, |
|  | ST16 3AF |
|  | Tel:- 01785 254 597 |
|  | Fax:- 01785 257 724 |
|  | Email:- sales@awe-ltd.co.uk |

## 2 - Composition / Information on ingredients.

Hazardous Components

This product contains no products listed as hazardous to health according to EC directive 1907/2006/EC, Article 31 and information is supplied as defined in Article 18(3)a of Regulation (EC) 1272/2008 (CLP)

Iron sulphate Xn R22; X Xi R36/38
CAS: 7720-
78-7 EINECS: 231-753-5

Acute Tox. 4, H302; Skin 10Irritant 2 H315; Eye 25\% Irritant. 2, H319 (1) Iron trichloride Xn R22; Xi R38-41
CAS: 7705-
08-0
EINECS:
231-729-4
XX
Eye Dam. 1, H318; (1) 2.5-
Acute Tox. 4, H302; Skin 10\%
Irritant. 2, H315
$\Leftrightarrow$
CAS: 7664- Sulphuric acid C R35
93-9
EINECS:
231-639-5

Skin Corr. 1A, H314

## 3 - Hazards Identification.

None
NFPA Ratings (Scale $0-4$ ):
Health $=2$
Flammability $=0$
Reactivity $=0$
Special $=0$

HMIS Ratings (Scale: $0=$ Minimal, $1=$ Slight,
$2=$ Moderate, $3=$ Serious, $4=$ Severe )
Health $=2$
Flammability $=0$
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

| 4 - First Aid Measures | In case of unconsciousness place patient stably in <br> side position for transportation. |
| :--- | :--- |
| Inhalation | Remove contaminated clothing and rinse skin <br> thoroughly with water. Get medical attention if <br> any discomfort continues. |
| Eye Contact | Promptly wash eyes with plenty of water for up to <br> 15 minutes. Open eyes wide apart and rinse well <br> to remove any <br> contact lenses. Do not remove contact lenses by <br> hand. Continue to rinse.. If symptoms persist, <br> consult a doctor. |
| Ingestion | Do not induce vomiting; call for medical help <br> immediately. Rinse mouth thoroughly with water <br> and give large amounts of water to drink. Never <br> give anything by mouth to an unconscious person. |


| $\mathbf{5}$ - Fire Fighting Measures | CO2, powder or water spray. Fight larger fires <br> with water spray or alcohol resistant foam. |
| :--- | :--- |
| Suitable Extinguishing Media | The product is not flammable. |
| Specific Hazards |  |

## 6 - Accidental Release Measures

Personal Precautions
Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and

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


| 7 - Handling \& Storage | Ensure good ventilation/exhaustion at the <br> workplace. <br> Prevent formation of aerosols. |
| :--- | :--- |
| Storage | Keep away from children. <br> Store at room temperature in original container. <br> Keep receptacle tightly sealed. |

## 8 - Exposure Controls / Personal Protection

| Exposure Limits | Not available. |
| :--- | :--- |
| Engineering methods to reduce exposure | Keep away from foodstuffs, beverages and feed. <br> Immediately remove all soiled and contaminated <br> clothing Wash hands before breaks and at the end <br> of work. Avoid contact with the eyes and skin. <br> Respiratory protection: |
| Personal Protection equipment / Respiratory <br> protection | In case of brief exposure or low pollution use <br> respiratory filter device. In case of intensive or <br> longer exposure use self-contained respiratory <br> protective device. <br> Wear tightly sealed goggles. <br> Selection of protective gloves must include <br> consideration of the penetration times along with <br> rates of diffusion and degradation. The selected <br> glove should comply with the specifications of EU <br> Directive 89/686/EEC and the standard EN374 <br> derived from it. |

## 9 - Physical and Chemical Properties

| Form | Liquid |
| :--- | :--- |
| Colour | As specified. |
| Physical | pH: N/A. |
|  | Boiling point / range $\sim 100^{\circ} \mathrm{C}$ |
|  | Relative Density $\sim 1.11248 \mathrm{Kg} / \mathrm{L}$ |
|  | Flash point $\sim$ Does not ignite |
|  | Water Solubility $\sim$ Completely miscible. |


| $\mathbf{1 0}$ - Stability and Reactivity | No decomposition if stored and applied as <br> directed. |
| :--- | :--- |
| Stability | Extremes of temperature and sunlight. |
| Conditions to avoid | None. |
| Hazardous decomposition products |  |

## 11 - Toxicological Information

| Acute Toxicity | Irritant to skin and mucous membranes. |
| :--- | :--- |
|  | Irritating effect on eyes. |
| Local Effects | No sensitization effects known. |
| Long term toxicity | No Data is available on this product itself |
| Further Information | None |
|  | The product shows the following dangers <br> according to the calculation method of the general <br> EU classification guidelines for preparations as <br> issued in the latest version:- <br> 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
Contaminated Packaging
Dispose of in accordance with local regulations.
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 | Redox buffer $\mathbf{4 6 8} \mathbf{~ m V : ~}$ |
| :--- | :--- |
| Safety, health and environmental |  |
| regulations/legislation specific for the substance |  |
| or mixture |  |
| *National regulations: |  |
| *Waterhazard class: Water hazard class 1 (Self- |  |
| assesment): slightly hazardous for water. *15.2 |  |
| Chemical safety assessment: |  |
| A Chemical Safety Assessment has not been |  |
| carried out. |  |

## 16 - Other Information

| Recommended use | For industrial application only. |
| :---: | :---: |
| End Use | - H302 Harmful if swallowed. <br> - H314 Causes severe skin burns and eye damage. <br> - H315 Causes skin irritation. <br> - H318 Causes serious eye damage. <br> - H319 Causes serious eye irritation. <br> - R22 Harmful if swallowed. <br> - R35 Causes severe burns. <br> - R36/38 Irritating to eyes and skin. <br> - R38 Irritating to skin. <br> - R41 Risk of serious damage to eyes. <br> The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. <br> The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release. It is not to be considered a warranty or quality specification. |

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