

# SAFETY DATA SHEET

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

**Trade name or designation of the mixture** HYDREX 1110  
**Registration number** -  
**Synonyms** None.  
**Issue date** 19-December-2017  
**Version number** 01

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Identified uses** Boiler Water Treatment  
**Uses advised against** None known.

### 1.3. Details of the supplier of the safety data sheet

**Supplier** VWS UK Ltd T/A Veolia Water Technologies  
**Address** Windsor Court  
Kingsmead Business Park  
High Wycombe-HP11 1JU - United Kingdom  
**Contact person** Hydrex Product Manager  
**Telephone** +44 1628 897 000  
**Fax** +44 1628 897 001  
**e-mail** hydrex.watertech@veolia.com  
**National Emergency Number** +44 1628 897 295  
**Global Emergency Contact** 1-760-476-3961 (code: 333239)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

#### Classification according to Regulation (EC) No 1272/2008 as amended

##### Health hazards

Acute toxicity, oral Category 4 H302 - Harmful if swallowed.

**Hazard summary** Harmful if swallowed. Occupational exposure to the substance or mixture may cause adverse health effects.

### 2.2. Label elements

#### Label according to Regulation (EC) No. 1272/2008 as amended

**Contains:** Sodium bisulfite

##### Hazard pictograms



**Signal word** Warning

##### Hazard statements

H302 Contact with acids liberates toxic gas.  
H302 Harmful if swallowed.

#### Precautionary statements

##### Prevention

P264 Wash hands thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.

##### Response

P301 + P312 IF SWALLOWED: Call a POISON CENTRE/doctor/paramedic/ if you feel unwell.  
P330 Rinse mouth.

|                                       |   |
|---------------------------------------|---|
| <b>Storage</b>                        | Store away from incompatible materials.   |
| <b>Disposal</b>                       |   |
| P501                                  | Dispose of contents/container in accordance with local/regional/national/international regulations. |
| <b>Supplemental label information</b> | None.   |
| <b>2.3. Other hazards</b>             | None known.   |

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

##### General information

| Chemical name                            | %                 | CAS-No. / EC No.       | REACH Registration No. | INDEX No.    | Notes |
|--|-------------------|------------------------|------------------------|--------------|-------|
| Sodium bisulfite                         | 30 - < 40         | 7631-90-5<br>231-548-0 | 01-2119524563-42-XXXX  | 016-064-00-8 |       |
| <b>Classification:</b>                   | Acute Tox. 4;H302 |                        |                        |              | B     |
| Other components below reportable levels | 50 - < 70         |                        |                        |              |       |

##### List of abbreviations and symbols that may be used above

#: This substance has been assigned Union workplace exposure limit(s).

M: M-factor

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

**Composition comments** The full text for all H-statements is displayed in section 16.

### SECTION 4: First aid measures

**General information** Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

#### 4.1. Description of first aid measures

|                     |   |
|---------------------|---|
| <b>Inhalation</b>   | Move to fresh air. Call a physician if symptoms develop or persist.   |
| <b>Skin contact</b> | Wash off with soap and water. Get medical attention if irritation develops and persists.  |
| <b>Eye contact</b>  | Rinse with water. Get medical attention if irritation develops and persists.  |
| <b>Ingestion</b>    | Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell. |

#### 4.2. Most important symptoms and effects, both acute and delayed

Exposure may cause temporary irritation, redness, or discomfort.

#### 4.3. Indication of any immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

### SECTION 5: Firefighting measures

**General fire hazards** No unusual fire or explosion hazards noted.

#### 5.1. Extinguishing media

|                                       |  |
|---------------------------------------|--|
| <b>Suitable extinguishing media</b>   | Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ). |
| <b>Unsuitable extinguishing media</b> | Not available.   |

#### 5.2. Special hazards arising from the substance or mixture

During fire, gases hazardous to health may be formed.

#### 5.3. Advice for firefighters

|  |   |
|--|---|
| <b>Special protective equipment for firefighters</b> | Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |
| <b>Special fire fighting procedures</b>              | Move containers from fire area if you can do so without risk.                                 |

**Specific methods** Use standard firefighting procedures and consider the hazards of other involved materials.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

**For emergency responders** Keep unnecessary personnel away.

**6.2. Environmental precautions** Avoid discharge into drains, water courses or onto the ground.

**6.3. Methods and material for containment and cleaning up** Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use.

**6.4. Reference to other sections** Not available.

## SECTION 7: Handling and storage

**7.1. Precautions for safe handling** Avoid forming spray/aerosol mists. Do not taste or swallow. Avoid prolonged exposure. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

**7.2. Conditions for safe storage, including any incompatibilities** Protect from sunlight. Store in original tightly closed container. Store in cool, dry place.

**7.3. Specific end use(s)** Not available.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

##### UK. EH40 Workplace Exposure Limits (WELs)

| Components                       | Type | Value               |
|----------------------------------|------|---------------------|
| Sodium bisulfite (CAS 7631-90-5) | TWA  | 5 mg/m <sup>3</sup> |

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Recommended monitoring procedures** Follow standard monitoring procedures.

**Derived no effect levels (DNELs)** Not available.

**Predicted no effect concentrations (PNECs)** Not available.

### 8.2. Exposure controls

**Appropriate engineering controls** Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

#### Individual protection measures, such as personal protective equipment

**General information** Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

**Eye/face protection** Before any handling, wear protective glasses side-shields complying with the NF EN 166.

##### Skin protection

**- Hand protection** Suitable gloves can be recommended by the glove supplier. Wear protective gloves which comply with the NF EN 374.

**- Other** Wear suitable protective clothing. Chemical resistant gloves.

**Respiratory protection** In case of insufficient ventilation, wear suitable respiratory equipment. Avoid forming spray/aerosol mists.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

**Hygiene measures**

Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**Environmental exposure controls**

Environmental manager must be informed of all major releases.

## *SECTION 9: Physical and chemical properties*

**9.1. Information on basic physical and chemical properties****Appearance**

|  |                 |
|--|-----------------|
| <b>Physical state</b>                          | Liquid.         |
| <b>Form</b>                                    | Liquid.         |
| <b>Colour</b>                                  | Not available.  |
| <b>Odour</b>                                   | Not available.  |
| <b>pH</b>                                      | 3.5 - 5         |
| <b>Melting point/freezing point</b>            | Not available.  |
| <b>Initial boiling point and boiling range</b> | Not available.  |
| <b>Flash point</b>                             | Not available.  |
| <b>Flammability (solid, gas)</b>               | Not applicable. |
| <b>Vapour pressure</b>                         | Not available.  |
| <b>Solubility(ies)</b>                         |                 |
| <b>Solubility (water)</b>                      | Not available.  |
| <b>Solubility (other)</b>                      | Not available.  |
| <b>Partition coefficient (n-octanol/water)</b> | Not available.  |
| <b>Viscosity</b>                               | Not available.  |
| <b>Explosive properties</b>                    | Not explosive.  |
| <b>Oxidising properties</b>                    | Not oxidising.  |

**9.2. Other information**

|                |                               |
|----------------|-------------------------------|
| <b>Density</b> | 1.31 - 1.35 g/cm <sup>3</sup> |
|----------------|-------------------------------|

## *SECTION 10: Stability and reactivity*

|   |   |
|---|---|
| <b>10.1. Reactivity</b>                         | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| <b>10.2. Chemical stability</b>                 | Material is stable under normal conditions.   |
| <b>10.3. Possibility of hazardous reactions</b> | No dangerous reaction known under conditions of normal use.                                   |
| <b>10.4. Conditions to avoid</b>                | Contact with incompatible materials.  |
| <b>10.5. Incompatible materials</b>             | Acids. Oxidizing agents.  |
| <b>10.6. Hazardous decomposition products</b>   | Carbon dioxide. Carbon monoxide. Sulphur oxides.  |

## *SECTION 11: Toxicological information*

**General information** Occupational exposure to the substance or mixture may cause adverse effects.

**Information on likely routes of exposure**

|                     |  |
|---------------------|--|
| <b>Inhalation</b>   | Prolonged inhalation may be harmful.                     |
| <b>Skin contact</b> | No adverse effects due to skin contact are expected.     |
| <b>Eye contact</b>  | Direct contact with eyes may cause temporary irritation. |
| <b>Ingestion</b>    | Harmful if swallowed.                                    |

**Symptoms** Exposure may cause temporary irritation, redness, or discomfort.

**11.1. Information on toxicological effects**

**Acute toxicity** Harmful if swallowed.

| <b>Product</b> | <b>Species</b> | <b>Test results</b>  |
|----------------|----------------|----------------------|
| HYDREX 1110    |                |                      |
| <b>Acute</b>   |                |                      |
| <b>Dermal</b>  |                |                      |
| LD50           | Rat            | 5264 mg/kg estimated |

| Product           | Species | Test results               |
|-------------------|---------|----------------------------|
| <b>Inhalation</b> |         |                            |
| LC50              | Rat     | 58 mg/l, 1 hours estimated |
| <b>Oral</b>       |         |                            |
| LD50              | Rat     | 5.3 g/kg estimated         |
| Components        | Species | Test results               |

Sodium bisulfite (CAS 7631-90-5)

**Acute**

**Dermal**

LD50

Rat

> 2000 mg/kg

**Inhalation**

LC50

Rat

> 22 mg/l, 1 hours

**Oral**

LD50

Rat

2 g/kg

\* Estimates for product may be based on additional component data not shown.

**Skin corrosion/irritation** Due to partial or complete lack of data the classification is not possible.

**Serious eye damage/eye irritation** Due to partial or complete lack of data the classification is not possible.

**Respiratory sensitisation** Due to partial or complete lack of data the classification is not possible.

**Skin sensitisation** Due to partial or complete lack of data the classification is not possible.

**Germ cell mutagenicity** Due to partial or complete lack of data the classification is not possible.

**Carcinogenicity** Due to partial or complete lack of data the classification is not possible.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

Sodium bisulfite (CAS 7631-90-5)

3 Not classifiable as to carcinogenicity to humans.

**Reproductive toxicity** Due to partial or complete lack of data the classification is not possible.

**Specific target organ toxicity - single exposure** Due to partial or complete lack of data the classification is not possible.

**Specific target organ toxicity - repeated exposure** Due to partial or complete lack of data the classification is not possible.

**Aspiration hazard** Due to partial or complete lack of data the classification is not possible.

**Mixture versus substance information** No information available.

**Other information** Not available.

**SECTION 12: Ecological information**

**12.1. Toxicity** Based on available data, the classification criteria are not met for hazardous to the aquatic environment.

| Product        | Species   | Test results                      |
|----------------|-----------|-----------------------------------|
| HYDREX 1110    |           |                                   |
| <b>Aquatic</b> |           |                                   |
| Fish           | LC50 Fish | 629.8191 mg/l, 96 hours estimated |
| Components     | Species   | Test results                      |

Sodium bisulfite (CAS 7631-90-5)

**Aquatic**

Crustacea

LC50

Pond snail (Lymnaea)

59 mg/l, 48 hours

Water flea (Daphnia magna)

82 mg/l, 96 hours

Fish

LC50

Sailfin molly (Poecilia latipinna)

220 mg/l, 50 hours

Western mosquitofish (Gambusia affinis)

240 mg/l, 48 hours

240 mg/l, 96 hours

Other

LC50

Turbellarian, flatworm (Dugesia)

179 mg/l, 48 hours

\* Estimates for product may be based on additional component data not shown.

**12.2. Persistence and degradability** No data is available on the degradability of this product.

|  |   |
|--|---|
| <b>12.3. Bioaccumulative potential</b>                 | No data available.  |
| <b>Partition coefficient n-octanol/water (log Kow)</b> | Not available.  |
| <b>Bioconcentration factor (BCF)</b>                   | Not available.  |
| <b>12.4. Mobility in soil</b>                          | No data available.  |
| <b>12.5. Results of PBT and vPvB assessment</b>        | Not available.  |
| <b>12.6. Other adverse effects</b>                     | No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component. |

### *SECTION 13: Disposal considerations*

#### **13.1. Waste treatment methods**

|                                     |  |
|-------------------------------------|--|
| <b>Residual waste</b>               | Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). |
| <b>Contaminated packaging</b>       | Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.       |
| <b>EU waste code</b>                | The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.   |
| <b>Disposal methods/information</b> | Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.                         |
| <b>Special precautions</b>          | Dispose in accordance with all applicable regulations.   |

### *SECTION 14: Transport information*

#### **ADR**

14.1. - 14.6.: Not regulated as dangerous goods.

#### **RID**

14.1. - 14.6.: Not regulated as dangerous goods.

#### **ADN**

14.1. - 14.6.: Not regulated as dangerous goods.

#### **IATA**

14.1. - 14.6.: Not regulated as dangerous goods.

#### **IMDG**

14.1. - 14.6.: Not regulated as dangerous goods.

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code** Not established.

### *SECTION 15: Regulatory information*

#### **15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

##### **EU regulations**

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended**  
Not listed.

**Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended**  
Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended**  
Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended**  
Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended**  
Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended**  
Not listed.

**Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended**  
Not listed.

**Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA**

Not listed.

**Authorisations**

**Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended**

Not listed.

**Restrictions on use**

**Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended**

Not listed.

**Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.**

Not listed.

**Other EU regulations**

**Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended**

Not listed.

**Other regulations**

The product is classified and labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

**National regulations**

Follow national regulation for work with chemical agents.

**15.2. Chemical safety assessment**

No Chemical Safety Assessment has been carried out.

**SECTION 16: Other information**

**List of abbreviations**

Not available.

**References**

Not available.

**Information on evaluation method leading to the classification of mixture**

The classification for health and environmental hazards is derived by a combination of calculator methods and test data, if available.

**Full text of any H-statements not written out in full under Sections 2 to 15**

H302 Harmful if swallowed.

**Revision information**

Product and Company Identification: Product Review

**Training information**

Follow training instructions when handling this material.

**Disclaimer**

Veolia Water Technologies is not able to anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use and or non respect of Veolia Water Technologies' requirement.