



## SAFETY DATA SHEET

### Hydrotreat 25

According to Regulation (EC) No 1907/2006, Annex II, as amended by Regulation (EU) No 453/2010

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

##### 1.1. Product identifier

Product name Hydrotreat 25

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

Identified uses Process water additive

Uses advised against No specific uses advised against are identified.

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

Supplier Hydro-X Water Treatment Ltd  
Eden Place  
Outgang Lane  
Dinnington  
Sheffield  
S25 3QT  
+44 (0) 1909 565133  
+44 (0) 1909 564301  
technical@hydro-x.co.uk

##### 1.4. Emergency telephone number

Emergency telephone +44 (0) 1909 565133 (9am-5pm, Mon-Fri)

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

###### Classification

###### Physical hazards

Not Classified

###### Health hazards

Skin Irrit. 2 - H315 Eye Dam. 1 - H318

###### Environmental hazards

Not Classified

###### Classification (67/548/EEC or 1999/45/EC)

Xi; R41, R38

###### Human health

This product is strongly irritating. May cause serious eye damage. See Section 11 for additional information on health hazards.

###### Environmental

The product is not expected to be hazardous to the environment.

##### 2.2. Label elements

###### Pictogram



**Hydrotreat 25****Signal word** Danger**Hazard statements**

H315 Causes skin irritation.  
H318 Causes serious eye damage.

**Precautionary statements**

P280 Wear protective gloves, eye and face protection.  
P302+P352 IF ON SKIN: Wash with plenty of water.  
P332+P313 If skin irritation occurs: Get medical advice/attention.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 Immediately call a POISON CENTER/doctor.  
P501 Dispose of contents/container in accordance with national regulations.

**Contains** Sodium hydrogensulphate, Sodium hydroxide**Supplementary precautionary statements**

P264 Wash contaminated skin thoroughly after handling.  
P321 Specific treatment (see medical advice on this label).  
P362+P364 Take off contaminated clothing and wash it before reuse.

**2.3. Other hazards**

This product does not contain any substances classified as PBT or vPvB.

**SECTION 3: Composition/information on ingredients****3.2. Mixtures**

|  |   |           |
|--|---|-----------|
| Sodium hydrogensulphate                    |   | 10 - <25% |
| CAS number: 7681-38-1 EC number: 231-665-7 |   |           |
| Classification                             | Classification (67/548/EEC or 1999/45/EC) |           |
| Eye Dam. 1 - H318                          | Xi; R41                                   |           |
| Sodium hydroxide                           |   | 1 - <2.5% |
| CAS number: 1310-73-2 EC number: 215-185-5 |   |           |
| Classification                             | Classification (67/548/EEC or 1999/45/EC) |           |
| Skin Corr. 1A - H314                       | C; R35                                    |           |
| Eye Dam. 1 - H318                          |   |           |

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

**SECTION 4: First aid measures****4.1. Description of first aid measures****Inhalation**

Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if any discomfort continues.

**Ingestion**

Rinse mouth thoroughly with water. Give plenty of water to drink. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if any discomfort continues.

**Skin contact**

Wash skin thoroughly with soap and water. Get medical attention if symptoms are severe or persist after washing.

**Eye contact**

May cause permanent damage if eye is not immediately irrigated. Remove any contact lenses and open eyelids wide apart. Rinse cautiously with water for several minutes. Get medical attention if irritation persists after washing.

## Hydrotreat 25

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

#### **Inhalation**

Irritation of nose, throat and airway.

#### **Ingestion**

May cause discomfort if swallowed. May cause stomach pain or vomiting.

#### **Skin contact**

Irritating to skin.

#### **Eye contact**

Causes serious eye damage.

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

#### **Notes for the doctor**

The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

#### **Specific treatments**

Treat symptomatically.

## **SECTION 5: Firefighting measures**

### **5.1. Extinguishing media**

#### **Suitable extinguishing media**

Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

#### **Unsuitable extinguishing media**

Do not use water jet as an extinguisher, as this will spread the fire.

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

#### **Hazardous combustion products**

Thermal decomposition or combustion products may include the following substances: Oxides of sulphur.

### **5.3. Advice for firefighters**

#### **Protective actions during firefighting**

Avoid breathing fire gases or vapours. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Ventilate closed spaces before entering them.

#### **Special protective equipment for firefighters**

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

## **SECTION 6: Accidental release measures**

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

#### **Personal precautions**

Wear protective clothing as described in Section 8 of this safety data sheet. Take care as floors and other surfaces may become slippery. Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation.

### **6.2. Environmental precautions**

#### **Environmental precautions**

Avoid discharge to the aquatic environment.

### **6.3. Methods and material for containment and cleaning up**

#### **Methods for cleaning up**

Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Do not empty into drains. Absorb spillage with inert, damp, non-combustible material. Collect and place in suitable waste disposal containers and seal securely. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. For waste disposal, see Section 13.

### **6.4. Reference to other sections**

## Hydrotreat 25

### Reference to other sections

See Section 11 for additional information on health hazards. For waste disposal, see Section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### Usage precautions

Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation.

#### Advice on general occupational hygiene

No specific hygiene procedures recommended but good personal hygiene practices should always be observed when working with chemical products.

### 7.2. Conditions for safe storage, including any incompatibilities

#### Storage precautions

Store in a cool and well-ventilated place.

### 7.3. Specific end use(s)

#### Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

## SECTION 8: Exposure Controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

##### Sodium hydroxide

Short-term exposure limit (15-minute): WEL 2 mg/m<sup>3</sup>

WEL = Workplace Exposure Limit

### 8.2. Exposure controls

#### Protective equipment



#### Appropriate engineering controls

Provide adequate ventilation. Provide eyewash station.

#### Eye/face protection

Chemical splash goggles. Personal protective equipment for eye and face protection should comply with European Standard EN166.

#### Hand protection

Wear protective gloves. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with European Standard EN374.

#### Other skin and body protection

Wear appropriate clothing to prevent any possibility of skin contact.

#### Hygiene measures

Wash contaminated skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet.

#### Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn.

#### Environmental exposure controls

Keep container tightly sealed when not in use.

## SECTION 9: Physical and Chemical Properties

## Hydrotreat 25

### 9.1. Information on basic physical and chemical properties

**Appearance**

Liquid.

**Colour**

Colourless.

**Odour**

Slight.

**Odour threshold**

Not available.

**pH**

pH (concentrated solution): 7 - 8

**Melting point**

Not available.

**Initial boiling point and range**

Not available.

**Flash point**

Not available.

**Evaporation rate**

Not available.

**Evaporation factor**

Not available.

**Flammability (solid, gas)**

Not relevant.

**Upper/lower flammability or explosive limits**

Not available.

**Vapour pressure**

Not available.

**Vapour density**

Not available.

**Relative density**

1.24 - 1.25

**Bulk density**

Not available.

**Solubility(ies)**

Soluble in water.

**Partition coefficient**

Not available.

**Auto-ignition temperature**

Not available.

**Decomposition Temperature**

Not available.

**Viscosity**

Not available.

**Explosive properties**

Not considered to be explosive.

**Oxidising properties**

Does not meet the criteria for classification as oxidising.

## Hydrotreat 25

### **9.2. Other information**

#### **Other information**

No information required.

## **SECTION 10: Stability and reactivity**

### **10.1. Reactivity**

There are no known reactivity hazards associated with this product.

### **10.2. Chemical stability**

#### **Stability**

Stable at normal ambient temperatures and when used as recommended.

### **10.3. Possibility of hazardous reactions**

Will not polymerise.

### **10.4. Conditions to avoid**

Avoid excessive heat for prolonged periods of time.

### **10.5. Incompatible materials**

#### **Materials to avoid**

Strong acids. Strong oxidising agents.

### **10.6. Hazardous decomposition products**

None at ambient temperatures. Thermal decomposition or combustion products may include the following substances:  
Sulphurous gases (SO<sub>x</sub>).

## **SECTION 11: Toxicological information**

### **11.1. Information on toxicological effects**

#### **Acute toxicity - oral**

##### **Notes (oral LD50)**

Based on available data the classification criteria are not met.

#### **Acute toxicity - dermal**

##### **Notes (dermal LD50)**

Based on available data the classification criteria are not met.

#### **Acute toxicity - inhalation**

##### **Notes (inhalation LC50)**

Based on available data the classification criteria are not met.

#### **Skin corrosion/irritation**

##### **Animal data**

Irritating.

#### **Serious eye damage/irritation**

Causes serious eye damage.

#### **Respiratory sensitisation**

Based on available data the classification criteria are not met.

#### **Skin sensitisation**

Based on available data the classification criteria are not met.

#### **Germ cell mutagenicity**

##### **Genotoxicity - in vitro**

Based on available data the classification criteria are not met.

##### **Genotoxicity - in vivo**

Based on available data the classification criteria are not met.

#### **Carcinogenicity**

## Hydrotreat 25

Based on available data the classification criteria are not met.

### **Reproductive toxicity**

#### **Reproductive toxicity - fertility**

Based on available data the classification criteria are not met.

### **Specific target organ toxicity - single exposure**

#### **STOT - single exposure**

Based on available data the classification criteria are not met.

### **Specific target organ toxicity - repeated exposure**

#### **STOT - repeated exposure**

Based on available data the classification criteria are not met.

### **Aspiration hazard**

Not anticipated to present an aspiration hazard, based on chemical structure.

### **Toxicological information on ingredients.**

## Hydrotreat 25

### Sodium hydrogensulphate

#### Acute toxicity - oral

##### Notes (oral LD50)

Based on available data the classification criteria are not met.

#### Acute toxicity - dermal

##### Notes (dermal LD50)

Based on available data the classification criteria are not met.

#### Acute toxicity - inhalation

##### Notes (inhalation LC50)

Based on available data the classification criteria are not met.

#### Skin corrosion/irritation

##### Animal data

Dose: 500 mg, 4 hours, Rabbit Erythema/eschar score: Very slight erythema - barely perceptible (1). Oedema score: No oedema (0). REACH dossier information. Based on available data the classification criteria are not met.

#### Serious eye damage/irritation

Causes serious eye damage.

#### Respiratory sensitisation

No information available.

#### Skin sensitisation

Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising. REACH dossier information. Based on available data the classification criteria are not met.

#### Germ cell mutagenicity

##### Genotoxicity - in vitro

Gene mutation: Negative. REACH dossier information. Based on available data the classification criteria are not met.

#### Carcinogenicity

No information available.

#### Reproductive toxicity

##### Reproductive toxicity - fertility

Based on available data the classification criteria are not met.

##### Reproductive toxicity - development

Maternal toxicity: - NOAEL: 2800 mg/kg/day, Oral, Mouse REACH dossier information. Based on available data the classification criteria are not met.

#### Specific target organ toxicity - single exposure

##### STOT - single exposure

Not classified as a specific target organ toxicant after a single exposure.

#### Specific target organ toxicity - repeated exposure

##### STOT - repeated exposure

NOEL 1000 mg/kg/day, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.

#### Aspiration hazard

Not anticipated to present an aspiration hazard, based on chemical structure.



## Hydrotreat 25

### Sodium hydroxide

#### Acute toxicity - oral

##### Notes (oral LD50)

Based on available data the classification criteria are not met.

#### Acute toxicity - dermal

##### Notes (dermal LD50)

Based on available data the classification criteria are not met.

#### Acute toxicity - inhalation

##### Notes (inhalation LC50)

Based on available data the classification criteria are not met.

#### Skin corrosion/irritation

##### Animal data

Skin Corr. 1A - H314 REACH dossier information.

#### Serious eye damage/irritation

Corrosive to skin. Corrosivity to eyes is assumed.

#### Respiratory sensitisation

Based on available data the classification criteria are not met.

#### Skin sensitisation

Patch test - Human: Not sensitising. REACH dossier information. Based on available data the classification criteria are not met.

#### Germ cell mutagenicity

##### Genotoxicity - in vitro

Bacterial reverse mutation test: Negative. REACH dossier information. Based on available data the classification criteria are not met.

#### Carcinogenicity

Based on available data the classification criteria are not met.

#### Reproductive toxicity

##### Reproductive toxicity - fertility

Based on available data the classification criteria are not met.

##### Reproductive toxicity - development

Based on available data the classification criteria are not met.

#### Specific target organ toxicity - single exposure

##### STOT - single exposure

Based on available data the classification criteria are not met.

#### Specific target organ toxicity - repeated exposure

##### STOT - repeated exposure

Based on available data the classification criteria are not met.

#### Aspiration hazard

Not anticipated to present an aspiration hazard, based on chemical structure.

## SECTION 12: Ecological Information

### Ecotoxicity

The product is not expected to be hazardous to the environment. However, large or frequent spills may have hazardous effects on the environment.

#### 12.1. Toxicity

Not considered toxic to fish.

## Hydrotreat 25

### Ecological information on ingredients.

#### Sodium hydrogensulphate

##### **Acute toxicity - fish**

LC<sub>50</sub>, 96 hours: 7960 mg/l, Pimephales promelas (Fat-head Minnow) REACH dossier information.

##### **Acute toxicity - aquatic invertebrates**

LC<sub>50</sub>, 48 hours: 1766 mg/l, Daphnia magna REACH dossier information.

#### Sodium hydroxide

##### **Acute toxicity - aquatic invertebrates**

EC<sub>50</sub>, 48 hours: 40.4 mg/l, Ceriodaphnia dubia REACH dossier information.

### 12.2. Persistence and degradability

#### **Persistence and degradability**

No data available.

### Ecological information on ingredients.

#### Sodium hydrogensulphate

##### **Persistence and degradability**

Substance is inorganic.

##### **Biodegradation**

Scientifically unjustified.

#### Sodium hydroxide

##### **Persistence and degradability**

The degradability of the product is not known.

### 12.3. Bioaccumulative potential

No data available on bioaccumulation.

#### **Partition coefficient**

Not available.

### Ecological information on ingredients.

#### Sodium hydrogensulphate

BCF: 0.5, REACH dossier information. The product is not bioaccumulating.

#### Sodium hydroxide

No data available on bioaccumulation.

### 12.4. Mobility in soil

#### **Mobility**

The product is soluble in water.

### Ecological information on ingredients.

#### Sodium hydrogensulphate

##### **Mobility**

The product is soluble in water.

#### Sodium hydroxide

##### **Mobility**

The product is soluble in water.

### 12.5. Results of PBT and vPvB assessment

This product does not contain any substances classified as PBT or vPvB.

## Hydrotreat 25

### Ecological information on ingredients.

#### Sodium hydrogensulphate

This substance is not classified as PBT or vPvB according to current EU criteria.

#### Sodium hydroxide

This substance is not classified as PBT or vPvB according to current EU criteria.

### **12.6. Other adverse effects**

Not determined.

### Ecological information on ingredients.

#### Sodium hydrogensulphate

None known.

#### Sodium hydroxide

None known.

## **SECTION 13: Disposal considerations**

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

#### **Disposal methods**

Reuse or recycle products wherever possible. When handling waste, the safety precautions applying to handling of the product should be considered. Dispose of contents/container in accordance with national regulations.

## **SECTION 14: Transport information**

### **General**

The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

### **14.1. UN number**

Not applicable.

### **14.2. UN proper shipping name**

Not applicable.

### **14.3. Transport hazard class(es)**

No transport warning sign required.

### **14.4. Packing group**

Not applicable.

### **14.5. Environmental hazards**

Environmentally hazardous substance/marine pollutant

No.

### **14.6. Special precautions for user**

Not applicable.

### **14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

## **SECTION 15: Regulatory information**

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

#### **National regulations**

EH40/2005 Workplace exposure limits. The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).

#### **EU legislation**

## Hydrotreat 25

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

## **SECTION 16: Other information**

### **Classification procedures according to Regulation (EC) 1272/2008**

Skin Irrit. 2 - H315, Eye Dam. 1 - H318: Calculation method.

**Revision date** 22/10/2014

**SDS number** 1240

#### **Risk phrases in full**

R35 Causes severe burns.

R38 Irritating to skin.

R41 Risk of serious damage to eyes.

#### **Hazard statements in full**

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H318 Causes serious eye damage.

### Disclaimer

The information contained in this safety data sheet does not constitute an assessment of workplace risks. The customer should undertake a formal COSHH assessment which should ensure that employees are aware of the hazards/precautions detailed in this safety data sheet. The COSHH assessment should also ensure that recommended safety equipment is available and where applicable, that the exposure limits detailed in Section 8 are not being exceeded. The above information is based on current knowledge at the time of publication and is given in good faith. Hydro-X Water Treatment Ltd implies no warranty as to the suitability of the product for any purpose other than outlined on the Product Data Sheet.