

## SAFETY DATA SHEET

according to Regulation (EC) No. 453/2010

### PH CAUSTIC

Revision Date: 02-Jan-2013

Revision Number: 7

#### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

##### 1.1 Product Identifier

Product Name PH CAUSTIC

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

Recommended Use pH Control

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

Halliburton Energy Services  
Halliburton House, Howemoss Place  
Kirkhill Industrial Estate  
Dyce  
Aberdeen, AB21 0GN  
United Kingdom

Emergency Phone Number: +44 1224 795277 or +1 281 575 5000

[www.halliburton.com](http://www.halliburton.com)

For further information, please contact

E-Mail address: [fdunexchem@halliburton.com](mailto:fdunexchem@halliburton.com)

##### 1.4 Emergency telephone number

+44 1224 795277 or +1 281 575 5000

Emergency telephone - §45 - (EC)1272/2008	
Europe	112
Denmark	Poison Control Hotline (DK): +45 82 12 12 12
France	ORFILA (FR): + 01 45 42 59 59
Germany	Poison Center Berlin (DE): +49 030 30686 790
Italy	Poison Center, Milan (IT): +39 02 6610 1029
Netherlands	National Poisons Information Center (NL): +31 30 274 88 88 (NB: this service is only available to health professionals)
Norway	Poisons Information (NO):+ 47 22 591300
Poland	Poison Control and Information Centre, Warsaw (PL): +48 22 619 66 54; +48 22 619 08 97
Spain	Poison Information Service (ES): +34 91 562 04 20
United Kingdom	NHS Direct (UK): +44 0845 46 47

#### 2. HAZARDS IDENTIFICATION

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

REGULATION (EC) No 1272/2008

Classification according to EU Directives 67/548/EEC or 1999/45/EC

For the full text of the R-phrases mentioned in this Section, see Section 16

Classification C - Corrosive.

Risk Phrases R35 Causes severe burns.

## 2.2 Label Elements

### Hazard Pictograms

**Signal Word** Not Hazardous

### Hazard Statements

Not Classified

### Precautionary Statements - EU (§28, 1272/2008)

Not Classified

### Contains

## 2.3 Other Hazards

None known

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

For the full text of the R-phrases mentioned in this Section, see Section 16

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

<b>Inhalation</b>	If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention.
<b>Eyes</b>	In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.
<b>Skin</b>	In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention. Remove contaminated clothing and launder before reuse.
<b>Ingestion</b>	Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.

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

No information available

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

**Notes to Physician** Treat symptomatically

## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

#### Suitable Extinguishing Media

All standard fire fighting media

#### Extinguishing media which must not be used for safety reasons

None known.

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

#### Special Exposure Hazards

May form explosive mixtures with strong acids.

### 5.3 Advice for firefighters

#### Special Protective Equipment for Fire-Fighters

Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

## 6. ACCIDENTAL RELEASE MEASURES

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

Use appropriate protective equipment.  
See Section 8 for additional information

**6.2 Environmental precautions**

Prevent from entering sewers, waterways, or low areas.

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

Isolate spill and stop leak where safe. Contain spill with sand or other inert materials. Neutralize to pH of 6-8. Scoop up and remove.

**6.4 Reference to other sections**

See Section 8 and 13 for additional information.

**7. HANDLING AND STORAGE****7.1 Precautions for Safe Handling**

Avoid contact with eyes, skin, or clothing. Avoid breathing vapors. Wash hands after use. Launder contaminated clothing before reuse.

**Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice

**7.2 Conditions for safe storage, including any incompatibilities**

Store away from acids. Store in a cool well ventilated area. Keep container closed when not in use.

**7.3 Specific End Use(s)**

**Exposure Scenario** No information available

**Other Guidelines** No information available

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1 Control parameters****Exposure Limits**

**Derived No Effect Level (DNEL)**

No information available.

**Worker**

**General Population**

**Predicted No Effect Concentration (PNEC)**

No information available.

**8.2 Exposure controls****Engineering Controls**

Use in a well ventilated area. Local exhaust ventilation should be used in areas without good cross ventilation.

**Personal protective equipment****Respiratory Protection**

Dust/mist respirator. (N95, P2/P3)

**Hand Protection**

Impervious rubber gloves.

**Skin Protection**

Full protective chemical resistant clothing. Rubber boots.

**Eye Protection**

Chemical goggles; also wear a face shield if splashing hazard exists.

**Other Precautions**

Eyewash fountains and safety showers must be easily accessible.

**Environmental Exposure Controls** No information available

**9. PHYSICAL AND CHEMICAL PROPERTIES****9.1 Information on basic physical and chemical properties**

**Physical State:** Liquid

**Color:** Clear colorless

**Odor:** Odorless

**Odor Threshold:** No information available

<u>Property</u> <u>Remarks/ - Method</u>	<u>Values</u>
<b>pH:</b>	14
<b>Freezing Point/Range</b>	No data available 12
<b>Melting Point/Range</b>	No data available
<b>Boiling Point/Range</b>	No data available
<b>Flash Point</b>	No data available
<b>Evaporation rate</b>	No data available
<b>Vapor Pressure</b>	No data available
<b>Vapor Density</b>	No data available
<b>Specific Gravity</b>	No data available
<b>Water Solubility</b>	No data available
<b>Solubility in other solvents</b>	No data available
<b>Partition coefficient: n-octanol/water</b>	No data available
<b>Autoignition Temperature</b>	No data available
<b>Decomposition Temperature</b>	No data available
<b>Viscosity</b>	No data available
<b>Explosive Properties</b>	No information available
<b>Oxidizing Properties</b>	No information available
<b>9.2 Other information</b>	
<b>VOC Content (%)</b>	No data available

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

Not applicable

### 10.2 Chemical Stability

Stable

### 10.3 Possibility of Hazardous Reactions

Will Not Occur

### 10.4 Conditions to Avoid

None anticipated

### 10.5 Incompatible Materials

Strong acids. Amphoteric metals such as aluminum, magnesium, lead, tin, or zinc.

### 10.6 Hazardous Decomposition Products

None known.

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on Toxicological Effects

#### Acute Toxicity

<b>Inhalation</b>	Causes severe respiratory burns.
<b>Eye Contact</b>	Causes severe eye burns.
<b>Skin Contact</b>	Causes severe burns.
<b>Ingestion</b>	Causes burns of the mouth, throat and stomach.

**Chronic Effects/Carcinogenicity** Prolonged, excessive exposure may cause erosion of the teeth.

### Toxicology data for the components

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

#### Ecotoxicity Effects

### 12.2 Persistence and degradability

No information available

### 12.3 Bioaccumulative potential

No information available

### 12.4 Mobility in soil

No information available

### 12.5 Results of PBT and vPvB assessment

No information available.

### 12.6 Other adverse effects

#### Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

#### Disposal Method

#### Contaminated Packaging

Disposal should be made in accordance with federal, state, and local regulations.  
Follow all applicable national or local regulations.

## 14. TRANSPORT INFORMATION

### IMDG/IMO

**UN Number:** UN1824,  
**UN Proper Shipping Name:** Sodium Hydroxide Solution  
**Transport Hazard Class(es):** , 8  
**Packing Group:** , II  
**Environmental Hazards:** Not applicable  
**EMS:** EmS F-A, S-B

### RID

**UN Number:** UN1824,  
**UN Proper Shipping Name:** Sodium Hydroxide Solution  
**Transport Hazard Class(es):** , 8  
**Packing Group:** , II  
**Environmental hazard:** Not applicable

### ADR

**UN Number:** UN1824,  
**UN Proper Shipping Name:** Sodium Hydroxide Solution  
**Transport Hazard Class(es):** , 8  
**Packing Group:** , II  
**Environmental hazard:** Not applicable

### IATA/ICAO

**UN Number:** UN1824,  
**UN Proper Shipping Name:** Sodium Hydroxide Solution  
**Transport Hazard Class(es):** , 8  
**Packing Group:** , II  
**Environmental hazard:** Not applicable

**Special Precautions for User** None

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**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable

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**15. REGULATORY INFORMATION**

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

**All of the components in the product are on the following Inventory lists:** All of the components in the product are on the following Inventory lists:.

**EINECS Inventory**

This product, and all its components, complies with EINECS

**US TSCA Inventory**

All components listed on inventory or are exempt.

**Canadian DSL Inventory**

All components listed on inventory or are exempt.

**Legend****TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List**Germany, Water Endangering Classes (WGK)**

WGK 1: Low hazard to waters.

**15.2 Chemical Safety Assessment**

No information available

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**16. OTHER INFORMATION**

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**Full text of R-phrases referred to under Sections 2 and 3**

R35 Causes severe burns.

**Key literature references and sources for data**[www.ChemADVISOR.com/](http://www.ChemADVISOR.com/)**Revision Date:**

02-Jan-2013

**Revision Note**

Not applicable

**This safety data sheet complies with the requirements of Regulation (EC) No. 453/2010****Disclaimer Statement**

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**End of Safety Data Sheet**