

Revision Date: 13.01.2011  
Revision: 01



## SAFETY DATA SHEET

### SODIUM HYPOCHLORITE SOLUTION, ... % CI ACTIVE

#### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

##### 1.1. Product identifier

<b>Product Name</b>	SODIUM HYPOCHLORITE SOLUTION, ... % CI ACTIVE
<b>Synonyms, Trade Names</b>	BLEACH, HYPO, BRIDOS, EUROCHLOR, EVERCHLOR CLEAR, SODIUM HYPOCHLORITE SOLUTION > 2.5%, CAFLON SHB 14, SOD HYPOCHLORITE 14/15% , SOD HYPOCHLORITE 14/15% SLY , SOD HYPOCHLORITE 5% , SODIUM HYPOCHLORITE 12 - 13 % SOLUTION, SODIUM HYPOCHLORITE 15% SOLUTION, SODIUM HYPOCHLORITE SOLUTION 16 - 18 % , SODIUM HYPOCHLORITE SOLUTION 3%, SODIUM HYPOCHLORITE 4% SOLUTION, SODIUM HYPOCHLORITE 7% SOLUTION, SODIUM HYPOCHLORITE 13% SOLUTION, SODIUM HYPOCHLORITE SOLUTION > 10%
<b>REACH Registration Number</b>	01-2119488154-34
<b>CAS-No.</b>	7681-52-9
<b>EU Index No.</b>	017-011-00-1
<b>EC No.</b>	231-668-3

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

**Identified uses**                      Disinfectant Chemical Intermediate

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

**Supplier:**                              Univar  
    Aquarius House  
    6 Midpoint Business Park  
    Thornbury  
    Bradford  
    BD3 7AY  
    +44 1274 267300  
    +44 1274 267306  
    sds@univareurope.com

##### 1.4. Emergency telephone number

**Emergency Contact Number**      +44 1274 267346  
**(Office Hours)**  
**Emergency Contact Number**      +441865 407333  
**(Outside Office Hours)**  
**Sds No.**                                      258

#### SECTION 2: HAZARDS IDENTIFICATION

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

###### **Classification (EC 1272/2008)**

Physical	Met. Corr. 1 - H290
Health	EUH031;Skin Corr. 1B - H314;STOT Single 3 - H335
Environmental	Aquatic Acute 1 - H400

###### **Classification (67/548)**

C;R34 R31 N;R50

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

## SODIUM HYPOCHLORITE SOLUTION, ... % CI ACTIVE

### 2.2. Label elements

EC No. 231-668-3  
Label In Accordance With (Ec) No. 1272/2008



**Signal Word** Danger

#### Hazard Statements

H290 May be corrosive to metals.  
H314 Causes severe skin burns and eye damage.  
H335 May cause respiratory irritation.  
H400 Very toxic to aquatic life.

#### Precautionary Statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P271 Use only outdoors or in a well-ventilated area.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P301+330+331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303+361+353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304+340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P305+351+338 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 or doctor/physician.  
P403 Store in a well-ventilated place.

#### Supplemental Label Information

EUH031 Contact with acids liberates toxic gas.

### 2.3. Other hazards

None.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substances

REACH Registration Number 01-2119488154-34  
CAS-No. 7681-52-9  
EU Index No. 017-011-00-1  
EC No. 231-668-3

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

#### Inhalation.

Remove victim immediately from source of exposure. Keep the affected person warm and at rest. Get prompt medical attention.

#### Ingestion

NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Rinse mouth thoroughly. Get medical attention.

#### Skin Contact

Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.

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### Eye Contact

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention immediately. Continue to rinse.

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

#### Inhalation.

In case of fire, toxic gases may be formed. Chlorine.

#### Ingestion

Ingestion may cause severe irritation of the mouth, the oesophagus and the gastrointestinal tract.

#### Skin Contact

Chemical burns.

#### Eye Contact

Causes burns. Risk of serious damage to eyes.

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

Get medical attention immediately!

## SECTION 5: FIREFIGHTING MEASURES

### 5.1. Extinguishing media

#### Extinguishing Media

Use fire-extinguishing media appropriate for surrounding materials.

#### 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

#### Specific Hazards

Chlorine. Oxygen.

### 5.3. Advice for firefighters

#### Special Fire Fighting Procedures

Water spray should be used to cool containers. Dike and collect extinguishing water.

#### Protective Measures In Fire

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

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

Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of spray mist and contact with skin and eyes. Provide adequate ventilation.

### 6.2. Environmental precautions

Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

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

Absorb with inert, damp, non-combustible material, then flush area with water. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

### 6.4. Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet. For waste disposal, see section 13.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling

Avoid spilling, skin and eye contact. Avoid inhalation of vapours and spray mists. Provide good ventilation. Warning! Do not use together with other products. May release dangerous gases (chlorine).

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

Keep containers tightly closed. Keep in original container. Protect from freezing and direct sunlight.

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## Storage Class

Corrosive storage.

## 7.3. 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

#### Ingredient Comments

No exposure limits noted for ingredient(s).

DNEL	Industry	Inhalation.	Long Term	1.55 mg/m <sup>3</sup>
DNEL	Industry	Inhalation.	Short Term	3.1 mg/m <sup>3</sup>
DNEL	Consumer	Inhalation.	Long Term	1.55 mg/m <sup>3</sup>
DNEL	Consumer	Inhalation.	Short Term	3.1 mg/m <sup>3</sup>

### 8.2. Exposure controls

#### Protective Equipment



#### Process Conditions

Provide eyewash, quick drench.

#### Engineering Measures

Provide adequate ventilation. Observe Occupational Exposure Limits and minimise the risk of inhalation of vapours.

#### Respiratory Equipment

If ventilation is insufficient, suitable respiratory protection must be provided.

#### Hand Protection

Use protective gloves made of: Nitrile. Butyl rubber. Neoprene. Polyvinyl chloride (PVC). Rubber (natural, latex). The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

#### Eye Protection

Wear approved safety goggles.

#### Other Protection

Wear rubber apron. Wear rubber footwear.

#### Hygiene Measures

Wash at the end of each work shift and before eating, smoking and using the toilet. Remove contaminated clothing and wash the skin thoroughly with soap and water after work. Eating, smoking and water fountains prohibited in immediate work area.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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

Appearance	Liquid
Colour	Green Yellow
Odour	Chlorine.
Solubility	Soluble in water.
Initial Boiling Point and Boiling Range:	>100
Melting Point (°C)	-17
Relative Density	1.20 - 1.27
Ph-Value, Conc. Solution	>11
Partition Coefficient (N-Octanol/Water)	-3.42

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### 9.2. Other information

Not available.

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

Generates toxic gas in contact with acid.

### 10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

### 10.3. Possibility of hazardous reactions

Generates toxic gas in contact with acid.

### 10.4. Conditions to avoid

Avoid excessive heat for prolonged periods of time. Avoid exposure to high temperatures or direct sunlight.

### 10.5. Incompatible materials

#### Materials To Avoid

Strong acids. Amines.

### 10.6. Hazardous decomposition products

Chlorine. Oxygen.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

<b>Toxic Dose 1 - Ld 50</b>	1100 mg/kg (oral rat)
<b>Acute Toxicity (Dermal LD50)</b>	> 2000 mg/kg Rat
<b>Acute Toxicity (Inhalation LC50)</b>	> 10500 mg/l (vapours) Rat 1 hour
<b>Aspiration Hazard</b>	None.

#### Inhalation

May cause damage to mucous membranes in nose, throat, lungs and bronchial system. May cause irritation to the respiratory system.

#### Ingestion.

May cause chemical burns in mouth, oesophagus and stomach.

#### Skin Contact

May cause serious chemical burns to the skin.

#### Eye Contact

Causes burns.

#### Target Organs

Respiratory system, lungs

## SECTION 12: ECOLOGICAL INFORMATION

#### Ecotoxicity:

The product contains a substance which is very toxic to aquatic organisms.

### 12.1. Toxicity

<b>LC 50, 96 Hrs, Fish mg/l</b>	0.01 - 0.1
<b>EC 50, 48 Hrs, Daphnia, mg/l</b>	0.01 - 0.1

### 12.2. Persistence and degradability

#### Degradability:

The product is expected to be biodegradable.

### 12.3. Bioaccumulative potential

#### Bioaccumulative Potential:

Bioaccumulation is unlikely to be significant because of the low water solubility of this product.

<b>Partition Coefficient</b>	-3.42
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### 12.4. Mobility in soil

**Mobility:**

The product is soluble in water.

### 12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB Substances.

### 12.6. Other adverse effects

Not known.

## SECTION 13: DISPOSAL CONSIDERATIONS

### **General Information**

Do not puncture or incinerate even when empty. Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.

### 13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements.

## SECTION 14: TRANSPORT INFORMATION

### 14.1. UN number

Un Number Road	1791
UN No. (IMDG)	1791
UN No. (ICAO)	1791

### 14.2 UN Proper Shipping Name

Proper Shipping Name      HYPOCHLORITE SOLUTION

### 14.3 Transport hazard class(es)

ADR/RID/ADN Class	8
ADR/RID/ADN Class	Class 8: Corrosive substances.
ADR Label No.	8
IMDG Class	8
ICAO Class/Division	8
Transport Labels	



### 14.4. Packing group

ADR/RID/ADN Packing group	II
IMDG Packing group	II
ICAO Packing group	II

### 14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant



### 14.6. Special precautions for user

EMS      F-A, S-B

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Emergency Action Code 2X  
 Hazard No. (ADR) 80  
 Tunnel Restriction Code (E)

### 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

#### **Statutory Instruments**

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

#### **Approved Code Of Practice**

Safety Data Sheets for Substances and Preparations. Classification and Labelling of Substances and Preparations Dangerous for Supply.

#### **Guidance Notes**

CHIP for everyone HSG(108). Workplace Exposure Limits EH40.

#### **Eu Legislation**

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), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

### 15.2. Chemical Safety Assessment

A chemical safety assessment has been carried out.

## SECTION 16: OTHER INFORMATION

#### **Revision Comments**

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision Date 13.01.2011  
 Revision 01  
 SDS No. 258  
 Safety Data Sheet Status Approved.  
 Date 22.07.2010  
 Signature Jitendra Panchal

#### **Risk Phrases In Full**

R34 Causes burns.  
 R31 Contact with acids liberates toxic gas.  
 R50 Very toxic to aquatic organisms.

#### **Hazard Statements In Full**

H314 Causes severe skin burns and eye damage.  
 EUH031 Contact with acids liberates toxic gas.  
 H290 May be corrosive to metals.  
 H335 May cause respiratory irritation.  
 H400 Very toxic to aquatic life.