

**Sodium Hypochlorite - 5 - 20%**

**1. Identification of the substance/preparation and of the company/undertaking**

**1.1 Product Identifier**

Trade Name: Sodium Hypochlorite Solution 5 - 20%

**1.2 Relevant Identified uses of the substance or mixture and uses advised against**

Uses: Disinfection of Swimming Pool Water

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

Company: Complete Pool Controls Ltd  
Unit 2, The Park  
Stoke Orchard  
Bishops Cleeve  
Gloucestershire  
GL52 7RS

Telephone: +44 (0) 8712 229081

Fax: +44 (0) 8712 229083

E-mail: [sales@cpc-chemicals.co.uk](mailto:sales@cpc-chemicals.co.uk)

**1.4 Emergency Telephone**

Tel: +44 (0) 8712 229081 (office hours)

+44 (0) 3712 229084 (out of office hours)

**2. Hazard Identification**

**2.1 Classification of the substance or mixture**

**Classification according to Regulation (EC) No 1272/2008**

|                   |      |
|-------------------|------|
| Met. Corr 1       | H290 |
| Skin Corrosion 1B | H314 |
| Acute Aquatic 1   | H400 |
| Aquatic Chronic   | H411 |

For the full text of the H statements mentioned in this section see Section 16.

**Human health**

Vapours may irritate the respiratory system and cause coughing, asthmatic breathing and breathlessness. Corrosive to skin and eyes.

**Environment**

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

**Physical and Chemical Hazards**

Contact with acids liberates toxic chlorine gas Product may be corrosive to some metals

**2.2 Label elements**

**Labelling according to Regulation (EC) No 1272/2008**

Hazard statements: EUH031 Contact with acids liberates toxic gas.  
H290 May be corrosive to metals  
H314 Causes severe skin burns and eye damage  
H400 Very toxic to aquatic life.

Signal word: Danger

Hazard pictograms: GHS05: Corrosion  
GHS09: Environmental



**2. Hazard Identification**

## Precautionary statements:

P273: Avoid release to the environment

P280: Wear protective gloves/protective clothing/eye protection/face protection

P303+361+353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water

P304+340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+351+338: IF IN EYES: Rinse continuously 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+235: Store in a well-ventilated place. Keep cool.

## Supplementary Precautionary Statements:

P260: Do not breathe vapours

P264: Wash contaminated skin thoroughly after handling.

P301+330+331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting

P363 : Wash contaminated clothing before reuse.

P390: Absorb spillage to prevent material damage.

P391: Collect spillage.

P405: Store locked up.

P406: Store in corrosive resistant/... container with a resistant inner liner.

**3. Composition/information on ingredients****3.1 Mixture**

| EINECS           | CAS       | CLP Classification                                      | Percent  |
|------------------|-----------|---------------------------------------------------------|----------|
| SODIUM HYDROXIDE |           |                                                         |          |
| 215-185-5        | 1310-73-2 | Met.Corr.1: H290; Skin Corr. 1A: H314; Eye Dam. 1: H318 | 0.1-1.0% |

## SODIUM HYPOCHLORITE

| EINECS    | CAS       | PBT / WEL | CLP Classification                                                             | Percent |
|-----------|-----------|-----------|--------------------------------------------------------------------------------|---------|
| 231-668-3 | 7681-52-9 | -         | Skin Corr. 1B: H314; Aquatic Acute 1: H400; Aquatic Chronic 2: H411; -: EUH031 | 5-20%   |

**4. First Aid measures****4.1 Description of first aid measures**

General information: Get medical attention immediately!

Inhalation: Move the exposed person to fresh air at once. For breathing difficulties oxygen may be necessary.

Ingestion: Do not induce vomiting. If confined to the mouth, rinse mouth thoroughly and ensure water is not swallowed. If swallowed, drink plenty of water. If substance has been swallowed, give water to drink immediately

Skin contact: Remove contaminated clothes and rinse skin thoroughly with water.

Eye contact: Check for and remove any contact lenses. Open eyes wide apart. Rinse opened eye with plenty of water for at least 15 minutes. Get medical attention.

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

Symptoms and effects: No information available.

**4.3 Indication of immediate medical attention and special treatment needed**

Treatment: Treat symptomatically

**Trade Name:** Sodium Hypochlorite 5 - 20%

## 5. Fire fighting measures

### 5.1 Extinguishing media:

Extinguishing media: Use fire-extinguishing media appropriate for surrounding materials.

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

Haz. comp. products: Thermal decomposition will evolve Chlorine. Contact with heavy metals, their compounds and alloys the product decomposes with evolution of oxygen.

### 5.3 Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

## 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.

### 6.2 Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

### 6.3 Methods and materials for containment and cleaning up

Clean-up procedures: Flush away small spillages with plenty of water. Large Spillages: Absorb with sand or other inert absorbent. Pick up with vacuum or absorbent solid, store in closed container for disposal. container for disposal by an appropriate method.

### 6.4 Reference to other sections

Refer to section 8 of SDS for personal protection details.

## 7. Handling and storage

### 7.1 Precautions for safe handling

Handling requirements Avoid contact with eyes. Handle with care as an alkaline material. Wear appropriate protective clothing. Avoid inhalation of vapours and spray mists. Do not mix with acids, or other cleaning fluids (especially ammonia). Do not mix with sodium bisulfite

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

Storage conditions: Unsuitable containers: metals. Store in vented vessels of rubber lined mild steel or HDPE. Uncontrolled pressure build up may occur in closed systems (vessels, pipes etc.) so all containers must have a venting device. Sludge may build up in tanks over time, due to salt deposition. Keep away from acids, ammonia solutions, amines and methanol. Keep away from heat and direct sunlight.

### 7.3 Specific end uses

Specific use(s) No information available

## 8. Exposure control/personal protection

### 8.1 Control parameters

Hazardous ingredients: SODIUM HYDROXIDE

Workplace exposure limits: Respirable dust

| State | 8 hour TWA | 15 min.STEL         | 8 hour TWA | 15 min.STEL |
|-------|------------|---------------------|------------|-------------|
| UK    | -          | 2 mg/m <sup>3</sup> | -          | -           |

## 8. Exposure control/personal protection

### 8.2 Exposure controls

|                        |                                                                                                                       |
|------------------------|-----------------------------------------------------------------------------------------------------------------------|
| Process conditions     | Provide eyewash station.                                                                                              |
| Engineering measures   | Provide adequate general and local exhaust ventilation                                                                |
| Respiratory protection | Self-contained breathing apparatus must be available in case of emergency.<br>For respirator use cartridge type P3 SL |
| Hand protection        | Wear protective gloves. Rubber or plastic.                                                                            |
| Eye protection         | Tightly fitting safety goggles / face shield.                                                                         |
| Skin protection        | Plastic apron, sleeves, boots - if handling large quantities, full body suit.                                         |

## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

|                                          |                      |                      |
|------------------------------------------|----------------------|----------------------|
| State:                                   | Liquid               |                      |
| Colour:                                  | Yellow-green         |                      |
| Odour:                                   | Irritating. Chlorine |                      |
| Solubility in water:                     | Soluble              |                      |
| Initial boiling point and boiling range: | 110°C                | Decomposes with heat |
| Melting point/range°C:                   | -17°C                |                      |
| Relative density:                        | 5% 1.10              |                      |
|                                          | 15% 1.26             |                      |
|                                          | 20%                  |                      |
| pH:                                      | >13                  |                      |

**9.2 Other Information** No data available

## 10. Stability and reactivity

### 10.1 Reactivity

|            |                                               |
|------------|-----------------------------------------------|
| Reactivity | Violent reaction with acids: Sodium bisulfite |
|------------|-----------------------------------------------|

### 10.2 Chemical stability

|                    |                          |
|--------------------|--------------------------|
| Chemical stability | Avoid contact with acids |
|--------------------|--------------------------|

### 10.3 Possibility of hazardous reactions

|                      |                                                                                                                                                                                           |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hazardous reactions: | Contact with acids liberates toxic chlorine gas. Reacts with amines and ammonia to form explosive compounds, and can react violently with methanol. Reacts strongly with sodium bisulfite |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### 10.4 Conditions to avoid

|                     |                                                      |
|---------------------|------------------------------------------------------|
| Conditions to avoid | Store in a cool dry place away from direct sunlight. |
|---------------------|------------------------------------------------------|

### 10.5 Incompatible materials

|                    |                                                                                                                                                                                                         |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Materials to avoid | Contact with acids liberates toxic chlorine gas. Decomposition with evolution of oxygen is accelerated by heat and light, and also by contact with metals, particularly copper, nickel, iron and monel. |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### 10.6 Hazardous decomposition products

|                        |                                                  |
|------------------------|--------------------------------------------------|
| Haz. decomp. products: | Thermal decomposition will evolve toxic vapours. |
|------------------------|--------------------------------------------------|

**11. Toxicological Information****11.1 Information on toxicological effects****Toxicity values:**

| Route   | Species | Test | Value         | Units |
|---------|---------|------|---------------|-------|
| ORAL    | MUS     | LD50 | 2,900 - 3,400 | mg/kg |
| VAPOURS | RAT     | LD50 | >10.5         | mg/kg |
| DERMAL  | RBT     | LD50 | >2,000        | mg/kg |

**Hazardous Ingredients:**

SODIUM HYPOCHLORITE SOLUTION...100% CL ACTIVE

|     |     |      |      |       |
|-----|-----|------|------|-------|
| ORL | MUS | LD50 | 5800 | mg/kg |
|-----|-----|------|------|-------|

SODIUM HYDROXIDE

|     |     |      |     |       |
|-----|-----|------|-----|-------|
| IPR | MUS | LD50 | 40  | mg/kg |
| ORL | RBT | LDLO | 500 | mg/kg |

**Relevant effects for substance:**

| Hazard                        | Route | Basis                 |
|-------------------------------|-------|-----------------------|
| Skin corrosion/irritation     | DRM   | Hazardous: calculated |
| Serious eye damage/irritation | OPT   | Hazardous: calculated |

**Symptoms / routes of exposure**

|               |                                                                                                                   |
|---------------|-------------------------------------------------------------------------------------------------------------------|
| Skin contact: | Blistering may occur. Progressive ulceration will occur if treatment is not immediate.                            |
| Eye contact:  | Corneal burns may occur. May cause permanent damage.                                                              |
| Ingestion:    | Corrosive burns may appear around the lips. Blood may be vomited. There may be bleeding from the mouth or nose.   |
| Inhalation:   | There may be shortness of breath with a burning sensation in the throat. Exposure may cause coughing or wheezing. |

**12. Ecological Information****12.1 Toxicity****Ecotoxicity values:**

| Species                                | Test      | Value | Units |
|----------------------------------------|-----------|-------|-------|
| Daphnia magna                          | 96H ErC50 | 2.1   | mg/l  |
| GREEN ALGA (Selenastrum capricornutum) | 48H EC50  | 28    | mg/l  |

**12.2 Persistence and degradability****Persistence and degradability:**

The methods for determining the biological degradability are not applicable to inorganic substances

**12.3 Bioaccumulative potential**

Bioaccumulative potential: No bioaccumulation potential

**12.4 Mobility in soil**

Mobility: Readily absorbed into soil.

**12.5 Results of PBT and PvB assessment****PBT identification:** This product is not identified as a PBT/vPvB substance**12.6 Other adverse effects**

Other adverse effects: Toxic to aquatic organisms.

**13. Disposal Considerations****13.1 Waste treatment methods**

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company

**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

**14. Transport Information****14.1 UN Number**

UN Number UN1791

**14.2 UN proper shipping name**

Shipping Name: HYPOCHLORITE SOLUTION  
(SODIUM HYPOCHLORITE SOLUTION)

**14.3 Transport hazard class(es)**

Transport class: 8

**14.4 Packing Group**

Packing Group II

**14.5 Environmental hazards**

Environmentally hazardous: Yes Marine pollutant: Yes

**14.6 Special precautions for user**

Special precautions: No special precautions.

Tunnel code: E

Transport category: 3

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

Transport in bulk: Not applicable

**15. Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for this substance or mixture.**

Specific regulations: Not applicable

**15.2 Chemical Safety Assessment**

Chemical Safety Assessment A chemical safety assessment has not been carried out for the substance or the mixture.

**16. Other information**

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

Phrases used in s.2 and s.3: EUH031 Contact with acids liberates toxic gas.  
H314 Causes severe skin burns and eye damage  
H400 Very toxic to aquatic life.

#### 16. Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

Phrases used in s.2 and s.3: EUH031 Contact with acids liberates toxic gas.  
H314 Causes severe skin burns and eye damage  
H400 Very toxic to aquatic life.

This information is believed to be accurate and represents the best information currently available to us. However, we make no

█ Indicates updated section.