

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: Deep Blue Pool Supplies
 Box 8899 Hermitage,
 Corsham, SN13 8DT

Telephone: +44 (0) 3330 907094

Fax: +44 (0) 3330 907094

E-mail: help@deepbluepoolsupplies.co.uk

1.4 Emergency Telephone

Tel: +44 (0) 3330 907094 (office hours)

Tel: 111 (Out of 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
231-668-3	7681-52-9	-	Skin Corr. 1B: H314; Aquatic Acute 1: H400; Aquatic Chronic 2: H411; -: EUH031
			Percent
			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

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 ³	-	-

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. 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

Route	Species	Test	Value	Units
ORL	MUS	LD50	5800	mg/kg

SODIUM HYDROXIDE

Route	Species	Test	Value	Units
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 III

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.

This information is believed to be accurate and represents the best information currently available to us. However, we make no warranty or merchantability, or fitness for any particular use, or any other warranty, express or implied, with respect to this information, and we assume no liability resulting from use of this information. Users should make their own investigations to determine the suitability of the information for their particular needs and uses.

█ Indicates updated section.