

# Safety Data Sheet

## Sodium Hypochlorite 10/11%

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### 1 IDENTIFICATION OF CHEMICAL

Product Name: Sodium Hypochlorite 10/11%  
Other Names: Chlorox / Liquid Shock

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### 2 COMPOSITION

Ingredients	Cas No.	Einecs No.	Phrases
Sodium Hypochlorite (10/11%)	7681-52-9	231-668-3	R31-34

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### 3 HAZARD IDENTIFICATION

Causes burns to skin, eyes and respiratory system.  
Contact with acids liberates toxic gas.

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### 4 FIRST AID

**Skin Contact:** Take off immediately all contaminated clothing. After contact with skin, wash immediately with plenty of water. If symptoms develop, obtain medical attention.

**Eye Contact:** SPEED IS ESSENTIAL. Immediately irrigated with eyewash solution or clean water, holding the eyelids apart, for at least 10 minutes. Obtain immediate medical attention.

**Ingestion:** Remove patient from exposure, keep warm and at rest. Administer oxygen if necessary. Obtain medical attention.

**Inhalation:** Remove from exposure, rest and keep arm. Administer oxygen if necessary. Obtain medical attention.

### OTHER INFORMATION

Symptomatic treatment and supportive therapy as indicated. Gastric lavage is not recommended.

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### 5 FIRE-FIGHTING MEASURES

Non-combustible. Oxidising agent: may assist combustion.  
Thermal decomposition will evolve toxic vapours. (Chlorine).  
See 'Hazardous Decomposition Products'.

**Extinguishing Media** Normal extinguishing media  
**Fire Fighting Protective Equipment** A self contained breathing apparatus and suitable protective clothing must be worn in fire conditions.

## 6 ACCIDENTAL RELEASE MEASURES

<b>Small spillages</b>	Wash the spillage area with water.
<b>Large spillages</b>	Contain spillages with sand, earth or any suitable adsorbent materials. Transfer to a container for disposal. Wash the spillage area with water. Spillages or uncontrolled discharges into watercourse, drains or sewers must be IMMEDIATELY alerted to the National Rivers Authority or other appropriate regulatory body.

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## 7 HANDLING AND STORAGE

<b>Handling</b>	Avoid contact with skin and eyes. Do not breathe mist. Do not mix with acids. Avoid contact with other cleaning agents. Provide adequate ventilation.
<b>Storage</b>	Keep away from heat and direct sunlight. Keep away from acids, ammonia solutions, amines and methanol. For small quantities vented containers made from glass or PVC are suitable.

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## 8 EXPOSURE CONTROL/PERSONAL PROTECTION

Wear suitable protective clothing, gloves and eye/face protection. PVC is recommended. When required to spray sodium hypochlorite solution or to work in mists adequate respiratory protection should be provided.

Where a cartridge/canister respirator is suitable use **Type P3SL (CEN 143)**

Check with protective equipment manufacture's data.

### Occupational Exposure Limits

#### **HAZARDOUS INGREDIENT(S)**

Sodium Hypochlorite Not Listed (UK HSE EH40)  
In case of chlorine emission the occupational exposure limit for chlorine should be observed.

	Long Term bhr TWA		Short Term		Time mins OES
	ppm	mg/m3	ppm	mg/m3	
Chlorine	0.5	1.5	1	3	
Sodium Hypochlorite mist (measured as C1 <sub>2</sub> )	-	1.5	-	3	-

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## 9 PHYSICAL AND CHEMICAL PROPERTIES

<b>Form</b>	Liquid
<b>Solubility (Water)</b>	miscible
<b>Colour</b>	Greenish-Yellow or Purple liquid (see note sec.16)
<b>Freezing Point (°C)</b>	-17
<b>Odour</b>	Faintly chlorinous
<b>Specific Gravity</b>	1.20 approx
<b>pH (Valve)</b>	>11
<b>Boiling Point (°C)</b>	110

Data applies to a solution of 10/11% (nominal) available chlorine.

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## 10 STABILITY AND REACTIVITY

**Hazardous Reactions** Contact with acids liberates toxic chlorine gas. Reacts with ammonia solutions and amines to form explosive compounds. Can react violently if in contact with methanol. Decomposition with evolution of oxygen is accelerated by light and heat and also by contact with many metals, particularly copper, nickel, iron and 'monel'. Thermal decomposition will evolve toxic vapours. Oxidising agent: may assist combustion.

**Hazardous Decomposition Product(s)** Chlorine

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## 11 TOXICOLOGICAL INFORMATION

**Inhalation** Mist and vapour are corrosive to the respiratory tract and may cause bronchial irritation. Gas (chlorine) produced under fire or acidic conditions is toxic by inhalation.

**Skin** Causes burns. Repeated or prolonged contact to dilute solutions may cause dermatitis. May cause skin sensitisation in some cases.

**Eyes** Risk of serious damage to eyes. Extremely severe irritant/corrosive causing severe initial pain. May cause permanent damage if eye is not immediately irrigated.

**Ingestion** Low oral toxicity. Will cause corrosion of an damage to the gastrointestinal tract.

**Long Term Exposure** Acute effects predominate.

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## 12 ECOLOGICAL INFORMATION

**Environmental Fate and Distribution** High tonnage material use in open systems. The product is soluble in water.

**Persistence and Degradation** The product decomposes quickly in soil or water.

**Toxicity** Toxic to aquatic organisms. Very toxic to fish.

**Effect on Effluent Treatment** The product is substantially removed in biological treatment processes. There is evidence of inhibition to the aerobic treatment process at a concentration (mg/l) of 0.5

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## 13 DISPOSAL CONSIDERATIONS

**Substance** Via an authorised waste disposal contractor to an approved waste disposal site. Observing all local and national regulations.

**Container** As substance.

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## 14 TRANSPORT INFORMATION

**UN No** 1791

**Primary Hazard** Corrosive

**Packing Group** III

**Hazard ID No** 85

**Class** 8

**ADR/RID Item No** 61(c)

**Hazchem** 2X

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## 15 REGULATORY INFORMATION

<b>Label Name</b>	Sodium Hypochlorite 10/11%
<b>Hazard Symbol(s)</b>	Corrosive
<b>Risk Phases:</b>	R31 Contact with acids liberates toxic gas. R34 Causes burns
<b>Safety Phases:</b>	S1/2 Keep locked up and out of reach of children S28 After contact with skin, wash immediately with plenty of water S45 In case of accident or if you feel unwell, seek medical advice immediately. Show label where possible. S50 Do not mix with acids

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## 16 OTHER INFORMATION

**Recommended uses and restrictions:** No further information.

**Further information sources:** No further information.

Sources of key data used to compile Safety Data Sheet.

Approved supply list. Approved carriage list, EH40, ACIGH tables.

**The data in this Safety Data Sheet has been supplied as required by the Chemicals (Hazard Identification and Packaging) Regulations 1997, as amended, for the purpose of protecting the health and safety of industrial users who are deemed capable of understanding and acting on the information provided. Please ensure that it is passed to the appropriate person(s) in your company, who are capable of acting on the information.**

**This data sheet does not constitute a users assessment of the workplace risk as required by the Health and Safety at Work Act, COSHH, Management of Health and Safety at Work or other health and safety legislation.**

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