

Safety data sheet
according to 1907/2006/EC, Article 31 as amended

Printing date 25.07.2023

Version number 1

Revision: 25.07.2023

SECTION 1: Identification of the substance/mixture and of the company/undertaking

· **1.1 Product identifier**

· **Trade name:** Sodium Hypochlorite 10-11%

· **Registration number** Mixture

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

· **Product category**

PC8 Biocidal products

PC19 Intermediate

PC20 Processing aids such as pH-regulators, flocculants, precipitants, neutralization agents

PC26 Paper and board treatment products

PC28 Perfumes, fragrances

PC29 Pharmaceuticals

PC34 Textile dyes, and impregnating products

PC35 Washing and cleaning products (including solvent based products)

PC37 Water treatment chemicals

PC0 Other

· **Application of the substance / the mixture**

The product has many industrial, professional and consumer applications.

· **Uses advised against**

Any use carrying a risk of direct contact with eyes/skin where workers are exposed without adequate personal protective equipment (PPE).

Processes involving the use of incompatible substances - refer to section 10.

Processes involving extreme heat use advised against.

Any use involving significant release of aerosol, vapour or dust in the breathing zone of workers where they are exposed without suitable respiratory protective equipment (RPE).

The product is intended exclusively for industrial and professional use.

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

· **Manufacturer/Supplier:**

Complete Pool Controls Ltd

Unit 2, The Park

Stoke Orchard

Bishops Cleeve

Gloucestershire

GL52 7RS

UK

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

email: sales@cpc-chemicals.co.uk

· **Further information obtainable from:** Product safety department.

· **1.4 Emergency telephone number:**

Members of the public seeking specific information on poisons should contact:

In England and Wales: NHS 111 - dial 111

In Scotland: NHS 24 - dial 111

GB

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31 as amended

Printing date 25.07.2023

Version number 1

Revision: 25.07.2023

Trade name: Sodium Hypochlorite 10-11%

(Contd. of page 1)

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.
 Eye Dam. 1 H318 Causes serious eye damage.



environment

Aquatic Acute 1 H400 Very toxic to aquatic life.
 Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
 The product is classified and labelled according to the GB CLP regulation.
- **Hazard pictograms** GHS05, GHS09
- **Signal word** Danger

- **Hazard-determining components of labelling:**

Sodium hypochlorite

- **Hazard statements**

H314 Causes severe skin burns and eye damage.
 H410 Very toxic to aquatic life with long lasting effects.

- **Precautionary statements**

P260 Do not breathe dusts or mists.
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
 P305+P351+P338 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/doctor.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Additional information:**

EUH031 Contact with acids liberates toxic gas.

- **2.3 Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

GB

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31 as amended

Printing date 25.07.2023

Version number 1

Revision: 25.07.2023

Trade name: Sodium Hypochlorite 10-11 %

(Contd. of page 2)

SECTION 3: Composition/information on ingredients

· **3.2 Chemical characterisation: Mixtures**

· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 7681-52-9 EINECS: 231-668-3	Sodium hypochlorite ⚠ Skin Corr. 1B, H314; Eye Dam. 1, H318; ⚠ Aquatic Acute 1, H400 (M=10); Aquatic Chronic 1, H410 (M=1) Specific concentration limit: EUH031: C ≥ 5 %	10–<25 %
-------------------------------------	--	----------

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

· **4.1 Description of first aid measures**

· **General information:**

Rinse contaminated clothes (fire hazard) with plenty of water.

Immediately remove any clothing soiled by the product.

· **After inhalation:**

In case of inhalation:

- Provide fresh air.

- In case of breathing difficulties administer oxygen.

- No mouth-to-mouth or mouth-to-nose resuscitation. Use respiratory bag or oxygen resuscitation apparatus.

- Do not leave patient unattended.

In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· **After eye contact:**

Check for and remove any contact lenses.

Rinse opened eye for several minutes under running water. Then consult a doctor.

· **After swallowing:**

Rinse out mouth and then drink plenty of water.

If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

Drink plenty of water and provide fresh air. Call for a doctor immediately.

· **Information for doctor:** Treat symptomatically and supportively.

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

Causes severe burns to skin and eyes.

Inhalation of chlorine gas is corrosive to respiratory passages and may cause irritation of the mouth, nose & throat.

Corrosive and poisonous by ingestion. Causes burns, abdominal cramps, nausea, lowered blood pressure diarrhoea, shock and coma. Death may occur in very severe cases.

Effects of exposure may be delayed.

· **Hazards**

Danger of gastric perforation.

Danger of pulmonary oedema.

(Contd. on page 4)

Safety data sheet
according to 1907/2006/EC, Article 31 as amended

Printing date 25.07.2023

Version number 1

Revision: 25.07.2023

Trade name: Sodium Hypochlorite 10-11%

(Contd. of page 3)

- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray.
Use fire extinguishing methods suitable to surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture**
Corrosive liquid.
In case of fire, the following can be released:
Chlorine gas
During heating or in case of fire poisonous gases are produced.
- **5.3 Advice for firefighters**
- **Protective equipment:**
Mouth respiratory protective device.
Wear self-contained respiratory protective device.
Do not inhale explosion gases or combustion gases.
Wear fully protective suit.
- **Additional information** Cool endangered receptacles with water spray.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation
For significant release, wear full chemical suit.
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**
Do not allow to penetrate the ground/soil.
Do not allow product to reach sewage system or any water course.
- **6.3 Methods and material for containment and cleaning up:**
Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.
Do not use combustible materials such as paper towels to clean up spills.
Significant release:
Pump into a clean labelled emergency container. After cleaning, flush away traces with water. Recover water for later processing.
Neutralize contaminated water with sodium thiosulphate solution
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

—GB—

(Contd. on page 5)

Safety data sheet
according to 1907/2006/EC, Article 31 as amended

Printing date 25.07.2023

Version number 1

Revision: 25.07.2023

Trade name: Sodium Hypochlorite 10-11%

(Contd. of page 4)

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Avoid contact with clothing and other combustible materials.

Do not mix with acids.

Avoid direct contact (skin/eye contact, ingestion and/or inhalation of fume/mist/dust) with the product in the undiluted form.

Safety showers and eye wash facilities should be available at the work area.

Contact lenses should not be worn while working with this product.

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

· Information about fire - and explosion protection:

Protect from heat.

Keep respiratory protective device available.

· 7.2 Conditions for safe storage, including any incompatibilities

· Storage:

· Requirements to be met by storerooms and receptacles:

Store only in the original receptacle.

Do not store in aluminium or galvanised containers.

Do not store on combustible materials such as wooden floors or wooden pallets.

Prevent any seepage into the ground.

· Information about storage in one common storage facility:

Store away from foodstuffs.

Store away from flammable substances.

Store away from combustible materials.

Do not store together with acids.

· Further information about storage conditions:

Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.

Bulk storage: Provide a catch-tank and anti-corrosion protected electrical equipment in a bunded area.

Minimum storage temperature: 15 °C

Maximum storage temperature: 25 °C

· Storage class: 8 B

· 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· Additional information about design of technical facilities: No further data; see section 7.

· Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· DNELs

Workers - Inhalation; Long term systemic effects: 1.55 mg/m³

Workers - Inhalation; Short term systemic effects: 3.1 mg/m³

Workers - Inhalation; Long term local effects: 1.55 mg/m³

Workers - Inhalation; Short term local effects: 3.1 mg/m³

General Population - Inhalation; Long term systemic effects: 1.55 mg/m³

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31 as amended

Printing date 25.07.2023

Version number 1

Revision: 25.07.2023

Trade name: Sodium Hypochlorite 10-11%

(Contd. of page 5)

General Population - Inhalation; Short term systemic effects: 3.1 mg/m³

General Population - Inhalation; Long term local effects: 1.55 mg/m³

General Population - Inhalation; Short term local effects: 3.1 mg/m³

· **PNECs**

Freshwater: 210 ng/l

Intermittent release: 260 ng/l

Marine water: 42 ng/l

STP: 4.69 mg/l

No exposure of sediment expected.

No exposure of soil expected.

Secondary poisoning: 11.1 mg/kg food

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Do not eat, drink, smoke or sniff while working.

Do not inhale gases / fumes / aerosols.

A safe system of work must be formulated and followed to ensure safe working with this product. Relevant workers must receive suitable and sufficient training and supervision.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Ensure that eyewash stations and safety showers are close to the workstation location.

· **Respiratory protection:** Use suitable respiratory protective device in case of insufficient ventilation.

· **Protection of hands:**



Protective gloves.

Use gloves tested and approved under appropriate government standards such as NIOSH (US) or EN374 (EU).

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

PVC gloves

Recommended thickness of the material: ≥ 1.2 mm

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

Break-through time: 480 minutes

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31 as amended

Printing date 25.07.2023

Version number 1

Revision: 25.07.2023

Trade name: Sodium Hypochlorite 10-11%

(Contd. of page 6)

· **Eye protection:**



Tightly sealed goggles conforming to EN166.

· **Body protection:**



Impervious protective clothing

Boots

Body protection must be chosen depending on product properties, activity and possible exposure.

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form:	Fluid
Colour:	Light yellow
Odour:	Like chlorine
Odour threshold:	Not determined.

· **pH-value at 20 °C:** 12

· **Change in condition**

Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	96–99 °C

· **Flash point:** Not applicable.

· **Flammability (solid, gas):** Not applicable.

· **Decomposition temperature:** Not determined.

· **Ignition temperature:** Product is not self-igniting.

· **Explosive properties:** Product does not present an explosion hazard.

· **Explosion limits:**

Lower:	Not determined.
Upper:	Not determined.

· **Vapour pressure:** Not determined.

· **Density at 20 °C:** 1.2 g/cm³

· **Relative density** Not determined.

· **Vapour density** Not determined.

· **Evaporation rate** Not determined.

(Contd. on page 8)

Safety data sheet

according to 1907/2006/EC, Article 31 as amended

Printing date 25.07.2023

Version number 1

Revision: 25.07.2023

Trade name: Sodium Hypochlorite 10-11%

(Contd. of page 7)

· Solubility in / Miscibility with water:	Fully miscible.
· Partition coefficient: n-octanol/water at 20 °C:	-3.42 log KOW
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· 9.2 Other information	NOTE: The physical data presented above are typical values and should not be construed as a specification.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
Slowly decomposes at ambient temperatures, releasing low concentrations of chlorine gas.
Decomposes on heating, on contact with acids and under influence of light producing toxic and corrosive gases including chlorine.
- **10.3 Possibility of hazardous reactions**
Reacts violently with combustible and reducing materials, causing fire and explosion hazard.
Reacts with acids releasing chlorine.
Reacts with metals forming hydrogen.
Reacts to form explosive products with amines, ammonium salts, aziridine, and methanol.
Explosive reactions with formic acid and phenylacetonitrile.
- **10.4 Conditions to avoid** Heat and static discharge.
- **10.5 Incompatible materials:**
Combustible materials.
Strong acids.
Finely powdered metals.
Substances specifically listed in section 10.3 as incompatible.
- **10.6 Hazardous decomposition products:**
Chlorine
Hydrogen chloride (HCl)
Chlorine compounds

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **Primary irritant effect:**
- **Skin corrosion/irritation**
Causes severe skin burns and eye damage.
- **Serious eye damage/irritation**
Causes serious eye damage.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

(Contd. on page 9)

Safety data sheet according to 1907/2006/EC, Article 31 as amended

Printing date 25.07.2023

Version number 1

Revision: 25.07.2023

Trade name: Sodium Hypochlorite 10-11%

(Contd. of page 8)

· **Subacute to chronic toxicity:** Prolonged or repeated skin contact may irritate and cause dermatitis.

· **Additional toxicological information:**

ROUTES OF EXPOSURE: Can be absorbed into the body by inhalation and by ingestion.

Inhalation may cause lung oedema, but only after initial corrosive effects on eyes and/or airways have become manifest. The symptoms of lung oedema often do not become manifest until a few hours have passed and they are aggravated by physical effort. Rest and medical observation are therefore essential. Immediate administration of an appropriate inhalation therapy by a doctor or a person authorized by him/her, should be considered.

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of oesophagus and stomach.

· **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

· **Germ cell mutagenicity** Based on available data, the classification criteria are not met.

· **Carcinogenicity** Based on available data, the classification criteria are not met.

· **Reproductive toxicity** Based on available data, the classification criteria are not met.

· **STOT-single exposure** Based on available data, the classification criteria are not met.

· **STOT-repeated exposure** Based on available data, the classification criteria are not met.

· **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:** No further relevant information available.

· **12.2 Persistence and degradability** No further relevant information available.

· **12.3 Bioaccumulative potential** Product is not expected to bioaccumulate.

· **12.4 Mobility in soil** No further relevant information available.

· **Ecotoxical effects:**

· **Remark:**

Very toxic for fish

Toxic for fish

· **Additional ecological information:**

· **General notes:**

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

Danger to drinking water if even small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Very toxic for aquatic organisms

· **12.5 Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation**

Recommended Hierarchy of Controls:

- Minimise waste;

(Contd. on page 10)

Safety data sheet

according to 1907/2006/EC, Article 31 as amended

Printing date 25.07.2023

Version number 1

Revision: 25.07.2023

Trade name: Sodium Hypochlorite 10-11%

(Contd. of page 9)

- Reuse if not contaminated;
- Recycle, if possible; or
- Safe disposal (if all else fails).

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Contact waste processors for recycling information.

Used, degraded or contaminated product may be classified as hazardous waste. Anyone classifying hazardous waste and determining its fate must be qualified in accordance with state and international legislation.

· **Uncleaned packaging:**

· **Recommendation:**

Container remains hazardous when empty. Continue to observe all precautions.

Disposal must be made according to official regulations.

Do not mix with other waste streams.

Containers, even those that are "empty," may contain residues that can develop flammable and/or hazardous vapours upon heating. Do not cut, drill, grind, weld, or perform similar operations on or near empty containers.

- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

· **14.1 UN-Number**

· **ADR/RID/ADN, IMDG, IATA**

UN1791

· **14.2 UN proper shipping name**

· **ADR/RID/ADN**

UN1791 HYPOCHLORITE SOLUTION,
ENVIRONMENTALLY HAZARDOUS
HYPOCHLORITE SOLUTION (Sodium hypochlorite)
HYPOCHLORITE SOLUTION

· **IMDG**

· **IATA**

· **14.3 Transport hazard class(es)**

· **ADR/RID/ADN**



· **Class**

8 Corrosive substances.

· **Label**

8

· **IMDG, IATA**



· **Class**

8 Corrosive substances.

· **Label**

8

(Contd. on page 11)

Safety data sheet

according to 1907/2006/EC, Article 31 as amended

Printing date 25.07.2023

Version number 1

Revision: 25.07.2023

Trade name: Sodium Hypochlorite 10-11%

(Contd. of page 10)

· 14.4 Packing group	II
· ADR/RID/ADN, IMDG, IATA	
· 14.5 Environmental hazards:	Product contains environmentally hazardous substances: Sodium hypochlorite
· Marine pollutant:	No
· Special marking (ADR/RID/ADN):	Symbol (fish and tree)
· 14.6 Special precautions for user	Warning: Corrosive substances.
· Hazard identification number (Kemler code):	80
· EMS Number:	F-A,S-B
· Segregation groups	(SGG8) Hypochlorites
· Stowage Category	B
· Segregation Code	SG20 Stow "away from" SGG1-acids
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· ADR/RID/ADN	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· Transport category	2
· Tunnel restriction code	E
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 1791 HYPOCHLORITE SOLUTION, 8, II, ENVIRONMENTALLY HAZARDOUS

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category** E1
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 200 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

GB

(Contd. on page 12)

Safety data sheet
according to 1907/2006/EC, Article 31 as amended

Printing date 25.07.2023

Version number 1

Revision: 25.07.2023

Trade name: Sodium Hypochlorite 10-11%

(Contd. of page 11)

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

· **Department issuing SDS:** Product safety department.

· **Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (UK REACH)

PNEC: Predicted No-Effect Concentration (UK REACH)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

GB