

Section 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier****Product name:** CHLORINE WATER**Product code:** B8A66953**1.2. Relevant identified uses of the substance or mixture and uses advised against****Use of substance / mixture:** PC21: Laboratory chemicals. ERC1: Manufacture of substances**1.3. Details of the supplier of the safety data sheet****Company name:** Philip Harris Ltd
2 Gregory Street
Hyde
Cheshire
SK14 4HR
United Kingdom**Tel:** +44 (0)845 1200 506**Fax:** +44 (0)161 367 2140**Email:** enquiries@philipharris.co.uk**1.4. Emergency telephone number****Emergency tel:** +44 (0) 845 1200 506**Manufacturer:** Eurolab Supplies Limited
Road 5
Winsford Industrial Estate
Winsford
Cheshire
CW1 3AZ
Tel: 01606 594593
Fax: 01606 594603
Email: rachel@eurolabsupplies.co.uk**Section 2: Hazards identification****2.1. Classification of the substance or mixture****Classification under CHIP:** -: R31; Xi: R36/38; N: R50; C: R34**Classification under CLP:** Skin Corr. 1B: H314; Aquatic Acute 1: H400; -: EUH031**Most important adverse effects:** Contact with acids liberates toxic gas. Irritating to eyes and skin. Very toxic to aquatic organisms. Causes burns.

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2.2. Label elements

Label elements under CLP:

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

Signal words: Danger

Hazard pictograms: GHS05: Corrosion
GHS09: Environmental



Precautionary statements: P264: Wash hands thoroughly after handling.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P273: Avoid release to the environment.
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P301+330+331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P310: Immediately call a POISON CENTER or doctor.
P391: Collect spillage.

Label elements under CHIP:

Hazard symbols: Dangerous for the environment.
Irritant.
Corrosive.



Risk phrases: R31: Contact with acids liberates toxic gas.
R36/38: Irritating to eyes and skin.
R50: Very toxic to aquatic organisms.
R34: Causes burns.

Safety phrases: S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S28: After contact with skin, wash immediately with plenty of soap and water.
S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S50: Do not mix with acids.
S7: Keep container tightly closed.
S61: Avoid release to the environment. Refer to special instructions / safety data sheets.

[cont...]

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2.3. Other hazards

PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

SODIUM HYPOCHLORITE SOLUTION CL ACTIVE

EINECS	CAS	CHIP Classification	CLP Classification	Percent
231-668-3	7681-52-9	-: R31; C: R34; N: R50	Skin Corr. 1B: H314; Aquatic Acute 1: H400; -: EUH031	1-10%

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water. Consult a doctor.

Eye contact: Bathe the eye with running water for 15 minutes. Consult a doctor.

Ingestion: Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a doctor.

Inhalation: Move to fresh air in case of accidental inhalation. If breathing stops: mouth to mouth breathing or artificial respiration. Oxygen if necessary. Immediately call in physician. Consult a doctor.

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

Delayed / immediate effects: Burning sensation, Cough, wheezing, laryngitis, Shortness of breath, spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema. Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.

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

Immediate / special treatment: The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Dry chemical powder.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes of hydrogen chloride / phosgene. In combustion emits toxic fumes of sodium oxide gases.

[cont...]

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5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Refer to section 8 of SDS for personal protection details.

6.2. Environmental precautions

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not discharge into drains or rivers. Discharge into the environment must be avoided.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Soak up with inert absorbent material and dispose of as hazardous waste. Do not flush with water. Keep in suitable, closed containers for disposal.

6.4. Reference to other sections

Reference to other sections: Refer to section 13 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Avoid inhalation of vapour or mist. For precautions see section 2.2

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Never allow product to get in contact with water during storage. Do not store near acids. Recommended storage temperature 2 - 8 °C
Storage class (TRGS 510): Non-combustible, corrosive hazardous materials

7.3. Specific end use(s)

Specific end use(s): Apart from uses mentioned in section 1.2 no other specific uses are stipulated.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits: No data available.

DNEL/PNEC Values

DNEL / PNEC No data available.

[cont...]

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8.2. Exposure controls

Engineering measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full face respirator with multi purpose combination (US) or type AXBEK (EN14387 respirator cartridges as a back up to engineering controls. If the respirator is the sole means of protection use a full face supplied air respirator. Use respirators and components tested & approved under appropriate government standards eg CEN (EU) or NIOSH (US).

Hand protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching the gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use.

Wash and dry hands. Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M) Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Eye protection: Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN166(EU).

Skin protection: Protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Environmental: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: No data available

Odour: No data available

Evaporation rate: No data available.

Oxidising: No data available.

Solubility in water: Miscible

Viscosity: No data available.

Boiling point/range°C: 111

Melting point/range°C: -20 - -30

Flammability limits %: lower: No data available.

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Flash point°C: No data available. **upper:** No data available.
Autoflammability°C: No data available. **Part.coeff. n-octanol/water:** No data available.
Relative density: 1.206 g/ml @ 25oC **Vapour pressure:** 23.3 hPa @ 20oC
VOC g/l: No data available. **pH:** No data available.

9.2. Other information

Other information: No data available.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: No data available.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: No data available.

10.4. Conditions to avoid

Conditions to avoid: No data available

10.5. Incompatible materials

Materials to avoid: Strong acids, Organic materials, Powdered metals, Forms shock-sensitive mixtures with certain other materials., Amines, Reacts violently with ammonium salts, aziridine, methanol, and phenylacetonitrile, sometimes resulting in explosions. Reacts with pri

10.6. Hazardous decomposition products

Haz. decomp. products: Other decomposition products - No data available. In the event of fire see section 5.

Section 11: Toxicological information

11.1. Information on toxicological effects

Hazardous ingredients:

SODIUM HYPOCHLORITE SOLUTION...100% CL ACTIVE

ORL	MUS	LD50	5800	mg/kg
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Relevant effects for mixture:

Effect	Route	Basis
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Irritation	OPT DRM	Hazardous: calculated
Corrosivity	OPT INH DRM	Hazardous: calculated

Symptoms / routes of exposure

Delayed / immediate effects: Burning sensation, Cough, wheezing, laryngitis, Shortness of breath, spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema. Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values: No data available.

12.2. Persistence and degradability

Persistence and degradability: No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential: No data available.

12.4. Mobility in soil

Mobility: No data available.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: No data available.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Offer surplus and non-recyclable solutions to a licensed disposal company.

Disposal of packaging: Dispose of as unused product.

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

Section 14: Transport information

14.1. UN number

UN number: UN1791

14.2. UN proper shipping name

Shipping name: HYPOCHLORITE SOLUTION

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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: No

14.6. Special precautions for user

Tunnel code: E

Transport category: 2

Section 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Other information

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

* indicates text in the SDS which has changed since the last revision.

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.
R31: Contact with acids liberates toxic gas.
R34: Causes burns.
R36/38: Irritating to eyes and skin.
R50: Very toxic to aquatic organisms.

Legend to abbreviations: PNEC = predicted no effect level
DNEL = derived no effect level
LD50 = median lethal dose
LC50 = median lethal concentration
EC50 = median effective concentration
IC50 = median inhibitory concentration
dw = dry weight
bw = body weight
cc = closed cup
oc = open cup

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MUS = mouse

GPG = guinea pig

RBT = rabbit

HAM = hamster

HMN = human

MAM = mammal

PGN = pigeon

IVN = intravenous

SCU = subcutaneous

SKN = skin

DRM = dermal

OCC = ocular/corneal

PCP = physico-chemical properties

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.