

Section 1. Identification**1.1 Product Identifier** 4923

Product Name CHLORINE WATER

CAS Number Mixture

REACH Registration No A registration number is not available as the substance or its uses are exempt, the annual tonnage does not require a registration or the registration is envisaged for a later date.

1.2 Relevant identified uses of the substance or mixture & uses advised against

Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.

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(Have this document to hand)**Section 2. Hazards Identification****2.1 Classification of the substance or mixture****Classification according to regulation 1272/2008/EC**

Skin corrosion/irritation, category 2

Acute toxicity, category 4 (inhalation)

Serious eye damage/irritation, category 2

Spec target organ tox - single, category 3

Hazard to aquatic environment, category 1

H315: Causes skin irritation.

H332: Harmful if inhaled.

H319: Causes serious eye irritation.

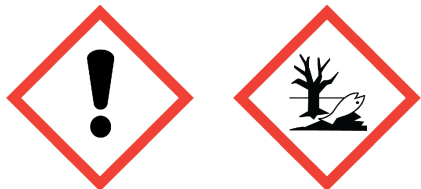
H335: May cause respiratory irritation.

H400: Very toxic to aquatic life.

2.2 Label elements**Labelling according to regulation 1272/2008/EC**

Signal word Warning

Hazard Pictograms



Hazard Statements	Harmful if inhaled. Causes serious eye irritation. Causes skin irritation. May cause respiratory irritation. Very toxic to aquatic life.
Precautionary Statements	Wash thoroughly after handling. Wear protective gloves / protective clothing / eye protection. Do not breathe fumes. Use only outdoors or in a well-ventilated area. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention.

Section 3. Composition

3.2 Mixtures

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Hydrochloric acid	7647-01-0	231-595-7	01-2119484862-27-XXXX	<2%	Skin Corr. 1A,STOT SE 3 (I)
Sodium dichloroisocyanurate	51580-86-0	220-767-7		<2%	Ox. Sol. 2,Acute Tox. 4 (O),Eye Irrit. 2,STOT SE 3 (I),Aquatic Acute 1,Aquatic Chronic 1

Section 4. First Aid

4.1 Description of first aid measures

Eyes	Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. OBTAIN MEDICAL ATTENTION.
Skin	Wash off skin thoroughly with water. Remove contaminated clothing immediately and wash before re-use. In severe cases or if exposure has been great, OBTAIN MEDICAL ATTENTION.
Inhalation	Remove from exposure.
Ingestion	Wash out the patients mouth thoroughly with water. OBTAIN MEDICAL ATTENTION URGENTLY.
Personal protection for first aiders	Wear protective gloves / eye protection.

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

No further relevant information available.

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

No further relevant information available.

Section 5. Fire Fighting

5.1 Extinguishing media

Extinguishing Media	Consider what other flammable materials are present and act accordingly.
Unsuitable Media	Nothing specified.

5.2 Special hazards arising from the substance or mixture

Hazards	Presents no specific fire danger.
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5.3 Advice for firefighters

Advice for firefighters	Consider all other materials in the vicinity.
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Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection	Use approved personal protective equipment. Evacuate area immediately. Do not allow general use of area until it is safe to do so.
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6.2 Environmental precautions

Environmental Keep non-neutralised material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.

6.3 Methods and material for containment and cleaning up

Major Spillage Contain and absorb on inert material. Transfer absorbent to salvage container for removal. Wash area down with copious amounts of water.

Minor Spillage Neutralise spill with soda ash, lime, calcium carbonate or sodium bicarbonate. Wash area down with copious amounts of water.

6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

Section 7. Storage & Handling

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Do not breath vapours. Do not allow to contaminate clothing.
Ensure Local Exhaust Ventilation maintains vapour concentrations below the recommended limits.

7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage .

7.3 Specific end use(s)

See section 1.2.

Section 8. Workplace Exposure & Personal Protection

8.1 Control parameters

Component	CAS No	Concentration	Workplace Exposure Limits			
			Long Term (8hr TWA)		Short Term 15min period	
Hydrochloric acid	7647-01-0	<2%	1.0 ppm	2.0 mg/m-3	5.0 ppm	8.0 mg/m-3
Sodium dichloroisocyanurate	51580-86-0	<2%	-	-	-	-

Exposure data source(s) IOELV: Indicative Occupational Exposure Limit Value.

8.2 Exposure controls

Respiratory Protection Use L.E.V. or natural ventilation to maintain vapour concentrations below exposure limits. If not, use a well maintained chemical cartridge respirator, or use self contained breathing apparatus.

Hand Protection Use nitrile gloves or PVC gauntlets.

Eye Protection Use tightly fitting chemical splash proof glasses or goggles.

Skin Protection If skin contact or contamination of clothing is likely, protective clothing must be worn.

Special Hazards No special precautions required.

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance Pale yellow liquid.
Odour Faint odour of chlorine.
pH 1 @ 20°C
Boiling Point 100°C Approx.
Melting Point 0°C Approx.
Flash Point Not applicable
Upper Flammable Limit Not applicable
Lower Flammable Limit Not applicable

Auto Ignition	Not applicable
Explosive Properties	No.
Oxidising Properties	Yes.
Vapour Pressure	Not applicable
Relative Density	1.0000
Water Solubility	Completely miscible in water.

9.2 Other information

No data available.

Section 10. Stability & Reactivity

10.1	Reactivity	No data available.
10.2	Chemical Stability	Stable under normal conditions
10.3	Possibility of hazardous reactions	No data available.
10.4	Conditions to Avoid	No specific conditions.
10.5	Incompatible Materials	Strong oxidising agents.
10.6	Hazardous Decomposition Products	Will decompose to emit toxic and irritant fumes of hydrogen chloride.

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes	The liquid is irritating to the eyes but unlikely to cause serious injury.
Skin	The liquid will be an irritant on brief or occasional exposure. May cause burns on prolonged contact.
LD50 Skin	Not available
Ingestion	Ingestion of large amounts may produce severe mouth burns, and if swallowed extensive damage to the oesophagus. Symptoms may include salivation, thirst, difficulty in swallowing, pain, shock and vomiting.
LD50 Oral	Not available
Inhalation	Presents no significant health hazard by inhalation.
LD50 Inhalation	Not available
TCLo	Not available
Carcinogenicity	Not considered to be a carcinogen.
Mutagenicity	Not considered to be a mutagen.
Reproductive Effects	None identified.

Section 12. Ecological

12.1	Toxicity	Neutralised material presents no specific environmental hazard.
	LC50 Algal	Not available
	LC50 Crustacea	Not available
	LC50 Fish	Not available
12.2	Persistence and degradability	No data available.
12.3	Bioaccumulative potential	No data available.
12.4	Mobility in soil	No data available.
12.5	Results of PBT & vPvB assessment	Assessment not required.
12.6	Other adverse effects	None known at present.

Section 13. Disposal Considerations

13.1 Waste treatment methods

Disposal Methods	Dilute in a large excess of water and carefully neutralise with soda ash, then wash to drain with copious amounts of water.
Contaminated Packaging	Carefully neutralise with a weak sodium hydroxide solution then wash out thoroughly with water. Use a licensed waste disposer.

Section 14. Transport Information

14.1 UN Number	3093
14.2 Proper Shipping Name	Corrosive liquid, oxidizing, N.O.S. (Chlorine Solution)
14.3 Transport classes	
UN classification	8
Subsidiary hazard(s)	5.1
Transport category	2
ADR Hazard ID	85
Tunnel Restriction Code	E
14.4 Packing Group	II
14.5 Environment hazards	See section 12.
14.6 Special precautions for user	No special precautions required.
14.7 Transport in bulk	Not transported in bulk.



Section 15. Regulatory Information

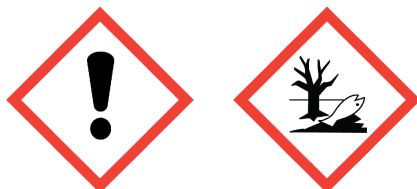
15.1 Safety, health and environment regulations specific for substance/mixture.

Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification Skin corrosion/irritation, category 2; Acute toxicity, category 4 (inhalation); Serious eye damage/irritation, category 2; Spec target organ tox - single, category 3; Hazard to aquatic environment, category 1

Signal word Warning

Hazard Pictograms



Hazard Statements H332, H319, H315, H335, H400
Harmful if inhaled. Causes serious eye irritation. Causes skin irritation. May cause respiratory irritation. Very toxic to aquatic life.

Precautionary Statements P264, P280, P260, P271, P332+P313, P337+P313
Wash thoroughly after handling. Wear protective gloves / protective clothing / eye protection. Do not breathe fumes. Use only outdoors or in a well-ventilated area. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention.

15.2 Chemical safety assessment

Assessment not required.

Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

Revision number: 1.2 (Supercedes revision 1.1)

Revision date: 16 April 2021

Reviewed by chemist: 16 April 2021

Printed date: 03 February 2023

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