

GX2

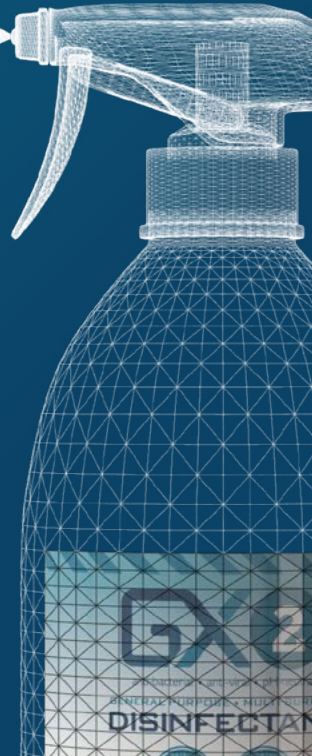
anti-bacterial • anti-viral • pH-neutral

WIDE-SPECTRUM • MULTI-SURFACE

DISINFECTANT

+ ANTI-VIRAL HAND SANITISER

INFORMATION • DATA



Introducing



anti-bacterial • anti-viral • pH-neutral



GX2 is a wide-spectrum disinfectant and sanitiser that comes in a range of sizes and concentrates to suit your needs.

Our product features an active ingredient that is skin-safe and non-toxic.

GX2 is effective against a wide range of pathogens – bacteria, viruses and fungal spores. Importantly, GX2 is shown to be effective against enveloped viruses including coronaviruses.

GX2 can be used in a range of disinfection applications and because our product is skin-safe and contains no harmful chemical ingredients, it is appropriate for use in sensitive scenarios where hazardous chemicals and disinfectants are not advisable.

GX2 is certified to BS EN 14476 and whilst the product is aimed at larger scale, multi-surface disinfection in the commercial sector, it is also safe for anti-viral hand sanitising.

Our product does not contain alcohol and does not cause irritation or dry skin like many alcohol-based products do. Our disinfectant is water-based – and is free of solvents, aldehydes or perfumes.

GX2 is extremely easy to use. Just apply to hard or non-porous surfaces and leave to dry.



GX2 IS PERFECT FOR MULTIPLE DISINFECTION APPLICATIONS, FROM THE CARE SECTOR, TO SCHOOLS AND OFFICES.



Product Description

GX2 is a disinfectant that is effective against a broad spectrum of bacteria, virus, fungi and spores, it can be used to disinfect surfaces and skin. It is water based and can be left to dry. It is pH neutral and does not contain fragrance. It is supplied in a range of concentrations for varying uses. If the product is a concentrate this will be marked clearly on the container.

- Do not dilute – supplied ready diluted for immediate use.
- Concentrate – dilute one-part GX2 with three-parts clean, fresh tap water

GX2 is non-hazardous.

Storage and Use

As with many chemicals, GX2 is sensitive to UV light, it should be stored in a cool dark place and used by the best before date. Keep out of reach of children.

For surface disinfection - apply the correct concentration to hard, non-porous surfaces, thoroughly wetting the surface with a sprayer. Treated surfaces should remain wet for two minutes. Wipe dry with a cloth, sponge, mop or allow to air dry. For soiled areas preliminary cleaning is required.

For hand disinfection – ensure the product is diluted (if required) remove dirt and spray liberally, allow to air dry. Do not use on broken skin. Patch test prior to use, if any reaction stop use.

GX2

Chemical Datasheet according to Regulation (EC) No. 1907/2006 & Nr. 1272/2008

Date of issue: May 2020

Issue Number: UK001

Use disinfectant safely! Always read label and product information before use.

IMPORTANT

Before you process GX2 or waste type it, please refer to the safety instructions on the products and pass this information on to employees, customers and other people who use this product further.

1. Substance / preparation and company identification.

Triolutions Ltd.

The Oaks,
Balfron Station,
Glasgow,
G63 0QN

Tel: 0333 772 0043

Email: info@triolutions.co.uk

Trade name: GX2

Preparation: pH neutral Hypochlorous acid produced using membrane cell electrolysis

Biocide Registration categories:

Category 1 – Human Hygiene

Products in this group are biocidal products used for human hygiene purposes, applied on or in contact with human skin or scalps for the primary purpose of disinfecting the skin or scalp.

Category 2 - Disinfectants and algacides not intended for direct application to humans or animals.

Used for the disinfection of surfaces, materials, equipment and furniture which are not used for direct contact with food or feeding stuffs. Usage areas include, inter alia, swimming pools, aquariums, bathing and other waters; air conditioning systems; and walls and floors in private, public, and industrial areas and in other areas for professional activities.

Used for disinfection of air, water not used for human or animal consumption, chemical toilets, waste water, hospital waste and soil.

Used as algacides for treatment of swimming pools, aquariums and other waters and for remedial treatment of construction materials.

Used to be incorporated in textiles, tissues, masks, paints and other articles or materials with the purpose of producing treated articles with disinfecting properties.

Category 3 - Veterinary hygiene

Used for veterinary hygiene purposes such as disinfectants, disinfecting soaps, oral or corporal hygiene products or with anti-microbial function.

Used to disinfect the materials and surfaces associated with the housing or transportation of animals.

Category 4 - Food and feed area

Used for the disinfection of equipment, containers, consumption utensils, surfaces or pipework associated with the production, transport, storage or consumption of food or feed (including drinking water) for humans and animals.

Used to impregnate materials which may enter into contact with food.

Category 5 – Drinking water

Used for the disinfection of drinking water for both humans and animals.

Active agent: pH neutral Sodium Hypochlorite

Designated Use: Agent for disinfection

Emergency phone: UK: +44 (0)333 772 0043

2. Classification

The compositions given are typical values, not specifications.

Composition: Hypochlorous acid and sodium hypochlorite in aqueous solution

EC Index: 017-011-00-1

Classification (1272/2008 EC): Aqueous solutions with less than 1% free chlorine are not classified

Classification (1999/45 EC): Aqueous solutions with less than 5% free chlorine are not classified

Hazard Identification

In normal use the product is not harmful to health or the environment

Hazard Warnings

H319 contains eye irritating component, however at (content <0.1% risk symbol is not necessary).

H411 contains component poisonous for water organisms, however at (content <0.1% - no risk symbol necessary).

H290 Concentrate may be corrosive to metals

Safety Hints

Avoid contact with eyes

Keep out of reach of children

Other Hazards

H031 Do not mix acids, this can release chlorine.

The product does not fulfil the criteria for classification as PBT or vPvB

3. Composition

Description

Aqueous mixture of sodium hypochlorite (NaOCl) and hypochlorous acid (HOCl) (EC-Index-Nr: 017-011-00-1) in weak saline aqueous solution, pH 6.5-7.5.

Table with constituents of concentrated GX2

Component	Formula	Concentration	Mass	CAS-nr	EC nr
Water	H ₂ O	>990,000mg/l	>99%	7732-18-5	231-791-2
Sodium Chloride	NaCl	4,500 (+/- 1,500) mg/l	<0.7%	7647-14-5	231-598-3
Hypochlorous acid	HOCl	100-950 mg/l	<0.1%	7790-92-3	232-232-5
Sodium hypochlorite	NaOCl	100-950 mg/l	<0.1%	7681-52-9	231-668-3

Regular tests of product composition and purity compliance to EN 901 are performed by certified laboratories.

Chemical Characterisation of the Preparation

Description

Electrolysis of high purity salt solution (EN 973 certified) and drinking water in a membrane cell reactor with inert electrodes, performed in a non-acidic pH medium. The precursor salt solution is 0.3-0.8% w/w.

4. First Aid Measures

General notes: Under normal use the product is not hazardous to humans or animals.

Inhalation: Under normal use there is no significant respiratory hazard.

Skin contact: Under normal use, there is no hazard to skin.

Eye Contact: Eye contact with diluted product is not irritating, eye contact with concentrated product can cause mild irritation. After eye contact rinse eyes with clean water.

Ingestion: Under normal use there is no significant Ingestion hazard. Large volumes may have a laxative effect. If ingested rinse mouth with clean water and drink fresh water.

5. Firefighting measures

Suitable extinguishing agents: GX2 does not burn and can not act fire accelerating. Water, foam, carbon dioxide or extinguishing powder can be used.

Special exposure hazards: No

6. Accidental Release Measures

Take up with absorbent material. Handling and storage, as required in Sections 7 and 8.

7 Handling and storage

Handling: The usual precautionary measures for handling chemicals should be followed.

Storage: If possible keep in a low light area (reduced exposure to UV) and at temperatures of 5° – 20° C, the Anolyte can become inactivated with UV and at temperatures exceeding 80° C.

Requirements for storage: Use plastic containers (as provided).

8 Exposure Control / Personal Protection

General protective measures: The usual precautionary measures for handling chemicals should be followed.

Breathing equipment: Not necessary when product in normal use.

Skin Protection: Not necessary when product in normal use.

Eye protection: Not necessary for applied concentrations, recommended for handling concentrated Anolyte.

Hygiene: Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using the toilet.

9. Physical and chemical properties

Physical state at 25 ° C: Liquid

Color: Colourless

Smell: Water, slight chlorine odour with concentrated Anolyte

Density at 25 ° C (g * cm⁻¹): 1

Solubility in water (wt%): Complete solubility

Boiling Point ° C: 100 at 1013 mbar

pH value: 6.5 – 7.5

Concentration NaOCl/HOCl: 0.002mol/l – 0.02mol/l

10. Stability and reactivity

In normal use, the product is stable.

Redox Potential: Redox potential at acidic pH = + 1.49

Decomposition Products: Contact with acids can produce low levels of chlorine.

Reactivity: Redox potential at acidic pH = +1.49V.

Chemical stability: Sodium hypochlorite does not exist as a salt, but only as aqueous solution <14% w/w.

Deactivation by: UV radiation, organic compounds and heat – 80° C+.

11. Toxicological

Toxicological data about the main components common salt (NaCl) and water (H₂O) are not relevant and therefore redundant. Toxicological data are solely made concerning the active agent sodium hypochlorite (NaOCl). Hypochlorous acid is a solvation product of sodium hypochlorite and in balance with it. Therefore the data are valid for both forms.

Acute toxicity, LD 50 available for NaOCl and HOCl:

LD50 – oral (rat) >5,000 – 8,200 mg/kg

LD50 – oral (mouse) 5,800 – 6,800 mg/kg

Inhalation: Can irritate the respiratory tract when inhaled at a high concentration as aerosol. Because of the low vapour pressure (in pH range 6.4 – 8.5) and low concentration, a direct aspiration is improbable.

Skin Contact: Skin irritation (rabbit) at >10,000mg/kg. Concentrated of Anolyte is <1,000mg/kg, not applicable.

Eye Contact: The contact of the eyes with concentrated aerosol or liquid can cause an irritation. No test data available for the present concentration.

Ingestion: This product can act as a laxative if swallowed.

Chronic Toxicity: There is no evidence of chronic effects.

12. Ecological

The product is metastable and is inactivated in a short time in the environment.

13 Transport Information

GX2 is because of its composition (< 0.2% active chlorine) not classified as hazardous substance.

There are no special provisions for transport or shipment

14. Regulatory provisions

According EC Directive 1272/2008 sodium hypochlorite solution with < 1% Active-Chlorine needs no identification.

According EC Directive 67/548/ECC and 1999/45/EC sodium hypochlorite solution with < 5% Active-Chlorine needs no identification labelling. Sodium hypochlorite solutions < 0.1% free chlorine need not to be labelled as eco-toxic.

S1 / 2 Keep out of the reach of children

S50 Do not mix with acids

The content and format of this SDS are in accordance with the guidelines of the European Communities 67/548/EWC, 91/155/EWC (as amended 93/112/EC and 2001/58/EC) 1999/45/EC and its adaptations to technical progress.

15. Other Information

All information contained herein is based on current knowledge at the date of writing this document. It is assumed that all information is accurate. It is intended to describe the product from the view point of safety requirements. It should therefore not be construed as guaranteeing specific properties.

Under no circumstances is the user exempt from respecting legislative or Regulations concerning safety, hygiene, health and environmental protection.

The storage, handling and use of the product should be as according to industrial health and safety conditions and according to local regulations.

For these and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage and other costs relating to the handling, storage, use, or disposal of the product. The safety data applies only to GX2. If the product is used as a component of another product this MSDS may not be applicable.



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