



**DISINFECTION
SIMPLIFIED,
SANITIZE A TO Z
IN JUST 1 MINUTE**



USER MANUAL



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generating disinfectant water for cleaning & sanitation
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Product image and Components identification:

1. Lid
2. Jar
3. Water Litre Mark
4. Titanium (coated with mixed metal oxide – MMO)
Electrolyte Plate
5. Connecting point of controller
6. LED indicator on black controller
7. Yellow button – Push for settings
8. Product ready – White light
9. Setting -1 – Green light
10. Setting -2 – Blue light
11. Setting -3 – Red light
12. Power supply connector

2.0 Application procedure

GREENGATE De-TOXER MAX is equipment meant for generating two kinds of wonder solutions after electrolysis after prescribed set time

2. A. To generate electrolysed disinfectant solution for cleaning & sanitation
2. B. To generate electrolysed solution for cleaning and degreasing

2. A. To generate electrolysed solution for cleaning and sanitation:

To generate electrolysed disinfectant solution with an Oxidation-Reduction Potential (ORP) in the range of +800 to 1000 mV (you will need to use any of the 3 settings)

- a. Add tap water (or purified RO water)
- b. Add 4 grams of table salt per litres water*, stir gently
- c. Place lid and plug in the power supply**

*Use only food-grade salt (NaCl/Kosher Salt). It is advisable not to make use of iodised salt.

**Power cord supply must be dry.

2. B. Generating electrolysed water for cleaning & degreasing

To generate KOH or Potassium hydroxide with an Oxidation-Reduction Potential (ORP) with in the rate of –100 to –300.

- a) Fill the jug up to the 3 litres mark with normal tap water (or purified water)
- b) Add 12 grams of Potassium carbonate* stir gently
- c) Close with the lid and switch on the power supply**
- d) Power On to Setting 3 to generate KOH in 7 minutes

*Use only the Potassium carbonate additive

**Power supply must be dry



3.0 Technical Information

With **GREENGATE De-TOXER MAX** you can generate two different solutions by using different salts as below:

- 3A. To generate effective disinfectant solution
- 3B. To generate degreasing solution
- 3A. How to generate effective disinfectant solution for A to Z sanitization:

There are two different kind of effective disinfectant solutions can be made With water (based on neutral and acidic pH) and Salt (NaCl).

a) Soft wonder Solution:

Tap water (or purified water) + salt (NaCl) (4g per liter) + Electricity (When you use tap water normally pH is above 7), after electrolysis Sodium hypochlorite is formed.

Sodium Hypochlorite is an inorganic ionic compound containing Sodium and Hypochlorite ions. The chemical formula of this compound is NaOCl. It is the Sodium salt of Hypochlorous acid. Sodium hypochlorite is a strong oxidiser

This disinfectant solution can be used for all purposes/A to Z sanitization as a soft disinfectant.

b) Strong wonder solution

Tap water (or purifier water)+ 1 table spoon of distilled white vinegar (5%) + salt (NaCl) (4g Per liter) + Electricity, (When you add one table spoon of vinegar (CH_3COOH) to tap water, the pH of water will be reduced to less than 7) after electrolysis Hypochlorous acid is formed. The chemical formula of this compound is HOCL, which contains a proton and Hypochlorite anion. Both Sodium hypochlorite and Hypochlorous acid contains anions made of oxides of Chlorine. Both are inorganic ionic compounds. In these two compounds, anions are similar, but actions are different, which makes them have different chemical and physical properties.

Hypochlorous acid (HOCL) is a weak acid and strong oxidiser.

HOCL is the main free Chlorine in Weak Acid Hypochlorous solution (WAHS) is the more effective form, because of its weak acidity. Hypochlorous acid (HOCL) is the most effective Disinfectant in the chlorine family available in dilute solution. It is reported that HOCL is 80 to 120 times more efficacious than Sodium hypochlorite.

Using this option, can generate strong disinfectant which is good for Hospital/medical Sanitization purpose.

3.0 Technical information (continued):

Electrolysis – Key information on chemical reactions:

Water + Common Salt (NaCl) + Electricity, after electrolysis forms Hypochlorous acid with powerful surface disinfectant properties:

The chemical reactions involved during electrolysis are:



3B. How to generate degreasing solution for cleaning sticky and degreased surface:

Tap water + Potassium carbonate + Electricity, after electrolysis forms a strong reducing

Agent - Potassium hydroxide with powerful surface-active properties:

The chemical reactions involved during electrolysis are:



4.0 Operational instructions:

✓ Fill jar with 3 Litres of water, add 12g of salt stir gently, connect controller with the Jar and switch ON electricity. In the LED indicator on the controller, white light will glow which indicates that equipment is ready for use.

✓ Depending on your application press the yellow button on controller to choose the setting as below:

4A. Setting 1: Press the button once for the system to start in which green light blinks and The system runs for 3 minutes to generate up to 40 ppm of Chlorine in 3 Litres of water.

Usage: Air spray, Hand/vegetable/fruits/grocery/kid's toys wash or spray.
 Wiping kids diaper rashes and cleaning of wounds.

4B. Setting 2: Press the button twice for blue light, which start blinking and then the System will run for 5 minutes to generate up to 60 ppm of Chlorine in the same quantity of water.

Usage: Office premises/interiors, Car interiors, furniture, windows, office chairs, Curtains, electronic gadgets, door knobs and handles spray or wash.

4C. Setting 3: Press the button thrice for red light, which start blinking and then the system will run for 7 minutes to generate up to 100 ppm of Chlorine in 3 litres of water. However, if you wish to generate more than 100 ppm of Chlorine, repeat the same process for another 7 minutes and it will generate up to 200 ppm of Chlorine in 3 litres of water.

Usage: Floor moping at Hotels, Hospitals, schools, malls, restaurants, Bathrooms, the public places, saloons, dental clinics, OP clinics, and Cleaning of medical equipment.

At each setting, the LED blinks till completion of the time set and stops automatically.

5.0 Method to determine the concentration of free Chlorine present in the solution:

If you wish to determine the proportion of free Chlorine present in a disinfectant solution generated, just use a simple Chlorine test strip with colour matches at 5, 10, 50 and 100. The test strips measures concentrations between 5 and 100 ppm of free Chlorine

It is simple, dependable, and cost-effective way to measure the concentration of free Chlorine in sanitizing solution.

Things to Know:

- Hypochlorous acid scientific formula is HOCL
- Hypochlorous acid is freely available chlorate ions (OCl), and total Chlorine can be determined by a Chlorine test strip in ppm.
- HOCl is most dominant in a Chlorine solution when pH is between 4 and 6.



HYPOCHLORUS ACID (HOCL) GENERATOR

Powered by



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