

Centrego Renew

2 Litre ECA Generator

Manual



Add salt to water and activate to produce ECA

Table of Contents

1.0 General.....3

1.1 Introduction and intended use3

1.2 Design and compliance3

1.2.1 Certification of materials.....3

1.2.2 Solution Certification.....3

1.3 Symbols.....4

2.0 Safety5

2.1 Caution Use Only as Directed5

2.2 Directions for Safe Use.....5

2.3 Water quality5

2.4 Warning points6

2.6 Further warning points7

3.0 Device parts.....8

3.1 Parts Supplied with the Unit8

3.2 Spray Dispenser8

4.0 Uses.....9

4.1 Use9

4.2 Usage9

4.3 Transportation9

4.4 Storage of the device9

4.5 Storage of the solution.....9

5.0 Handling.....10

5.1 Handling the product10

5.2 Handling when unpacking10

5.3 Handling when in use.....10

5.3 Handling when disposing of device11

6.0 Operation.....12

6.1 Step by step guide12

6.2 Breakdown graph.....12

7.0 Trouble shooting14

7.1 Page one of troubleshooting14

7.2 Page one of troubleshooting15

8.0 Product Maintenance.....16

8.1 Maintenance of the body16

8.2 Dry and Storage16

8.3 Cleaning the inside of the device16

8.4 Warranty16

9 Safety Information translated.....17

9.1 English17

9.2 Espanol.....17

9 Safety Information translated.....18

9.3 Francais18

9.4 Italiano.....18

10 EU and UK Biocides Statement.....19



1.0 General

1.1 Introduction and intended use

Congratulations on the purchase of your Centrego Renew. Before using this unit for the first time, please read the instruction manual carefully and keep all information for future reference. These instructions will show you how to use the Centrego Renew safely and ensure you get the most out of your ECA solution generator.

This device produces ECA (Electrochemical activation) disinfection and cleaning solution from salt and water on site. The solution from the device can replace almost all disinfection and cleaning products that are used at your business or home. ECA solution is an eco-friendly way of reducing your carbon footprint and plastic waste and protecting your staff's health.

Centrego produces high-grade disinfection and cleaning solution generators for all industrial uses. Using ECA solution in your organisation is the most environmentally responsible way to protect staff, customers, assets and the environment, reducing carbon emissions and saving costs. Kills all microorganisms, including bacteria, viruses, spores and fungi with rapid contact times, high efficacy, and limited regrowth.

1.2 Design and compliance

1.2.1 Certification of electrical and materials

- European Chemicals Agency (ECHA) listed
- UK Health & Safety Executive (HSE) listed
- US Environmental Protection Agency Approved
- CE Certified
- US NRTL ETL Mark
- IECCE CB
- FCC
- UKCA


1.2.2 Solution Certification


- EN14476
- EN16777
- EN13697
- EN1650
- EN14348
- EN13727
- EN13624
- EN1656 (Cefas Aquaculture approved)
- EN1500
- EN17126
- EN1276

Product name	Centrego Renew
Model number	FH0113
Capacity	2ls (4.22US pints)
Additive	Salt (NaCl)
Additive amount	Additive amount up to 4grms per litre
Mode of activation	Electro Chemical Activation (ECA)
Active substance	Mixed oxidant solution - Hypochlorous acid
	HOCl and sodium hypochlorite (NaOCl)
Permitted water temperature range	5 to 35C (41 to 95F)
Input water quality	pH range: pH6 - pH8
Activated solution pH range	pH7 - pH9
Ratings	Power Adapter: Input: 100-240VAC, 1.5A Max., Output: 9.0VDC, 4A, 36.0W Generator: 9Vdc, 4A, 36W
Electrode	Iridium on titanium
Activation timings	4 or 8 minutes
Base	360° rotational base
Box dimensions	Outer box dimensions 384x168x292mm
Device dimensions	Jug and base - H305mmxW200xD220mm
Warranty	1 year on all parts, except spray bottle
Indoor or outdoor use	Indoor use
Altitude	Up to 2000m
Temperature	5 - 40 °C
Relative Humidity	45 - 80% RH
Mains supply voltage fluctuations	± 10%
OVERVOLTAGE CATEGORY	II
WET LOCATION, if applicable	Not used in wet location
POLLUTION DEGREE of the intended environment	2

1.3 Symbols

Below are symbols that will be used in this document and on the device. This outlines their intent.

	This symbol is used on the device or in the document to indicate that instructions must be followed for safe and correct operation. If this symbol appears always read fully before operating.
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	This symbol is used on the device or in the document to indicate that instructions must be followed in order to avoid an electric shock. If this symbol appears always read fully before operating.
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2.0 Safety

2.1 Caution Use Only as Directed


- Use only for surface and fabric cleaning, disinfection and deodorisation.
- Do not spray into your eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice if irritation occurs.
- Do not swallow the activated solution. If swallowed, seek medical advice.
- Do not use this device near a fire, radiator, microwave or stove/cooker.
- Wash hands after use. People with sensitive or damaged skin should avoid prolonged contact with the product to prevent issues.
- Keep device and solution out of the reach of children and pets.

2.2 Directions for Safe Use

- Do not overfill or under-fill the jug with water before making ECA solution.
- Use only the amount of salt outlined in the operation guide and only use the spoon provided.
- Do not move the unit during operation.
- Do not tip the jug when full of liquid.
- Do not keep the activated water in the refrigerator where it can be confused with drinking water.
- Do not freeze the device or the solution produced by the device.
- Use solution around one week after production and then dispose of.
- Unused solutions can be disposed of in a sink.
- Unused solutions can also be reactivated, restoring the disinfection, cleaning and deodorising power.
- Unplug the base from the power supply overnight or if not used for an extended amount of time.
- Avoid direct exposure of the unit to the sun. This might cause fire or damage to the device.
- Do not use ground/rain water, polluted water or excessively hard water to fill the bottle or jug.

2.3 Water quality

- Use water with a pH range of pH6 - pH8
- Use water with hardness of <180ppm calcium carbonate or <12dH
- Low calcium water is recommended.
- Do not use ground/rain water, polluted water or excessively hard water.
- If hard water is used there may be a build-up of limescale.
- Do not pour boiling water into the Centrego Renew.

	CAUTION - Use only the power adapter provided with the Centrego Renew.
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2.4 Warning points

- Always make sure that the base of the jug is clean before use.
- Ensure that salt and water is mixed until the salt cannot be seen in the jug before activation.
- Ensure salt is completely dissolved in the water before producing ECA solution.
- DANGER - Do not handle any electrical contact or power adapter with wet hands.
- DANGER - Do not attempt to fit the Centrego Renew jug or base to any other product.
- Do not use the power adapter from the Centrego Renew with any other product.

- After use, rinse the jug in cold water, carefully wipe inside and leave it to dry if stored.
- Only remove the jug from the base once activated. If removed during activation, the solution will not be fully activated.
- Do not dilute or mix with any chemicals to produce a solution or for cleaning.
- Do not touch the electrode guard at the bottom/inside or wipe with excessive force.
- KEEP OUT OF REACH OF CHILDREN AND ANIMALS

- The activated solution will kill up to 99.99% of bacteria and viruses within 1 minute of contact.
- Efficacy testing was undertaken in independent accredited laboratories to international standards, evidencing the kill rates of the solutions against different bacteria, viruses, spores, fungi and moulds.
- Microbial efficacy test results can be supplied.



2.6 Further warning points

- If the inside of the jug needs to be dried out for storage, do not use a hairdryer or put on a radiator to speed up drying. Rinse out the jug with tap water and leave to air dry.
- When sterilizing clothes and curtains, rub with cloth after applying ECA solution to remove stains
- After disinfecting any items that may enter the mouth, such as kitchen supplies and children's products, please wipe or rinse after disinfection.
- If a large amount of disinfectant is spilt from the spray jug or bottle, wipe with a microfibre cloth.
- Do not use boiling or hot water with this device, as it may cause damage and distortion to the bottle.

- Do not freeze when there is liquid in the bottle. This may cause cracking to the jug.
- Do not use thinner, benzine, wax, or other abrasive cleaning tools or liquids.
- Do not submerge the jug base, jug or plug adapter in water or liquid.
- When salty water (brine) evaporates, it leaves a salty residue. Clean this only with a slightly damp microfibre cleaning cloth.

- The jug base has a fluid drainage system. If fluid drips down under the jug, it will drain through the bottom of the jug base. Ensure that the device is located on a surface that is waterproof for this reason.

	CAUTION - Attempting connection from this product to any other device may cause injury
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	• DANGER - Do not handle any electrical contact or power adapter with wet hands
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3.0 Device parts

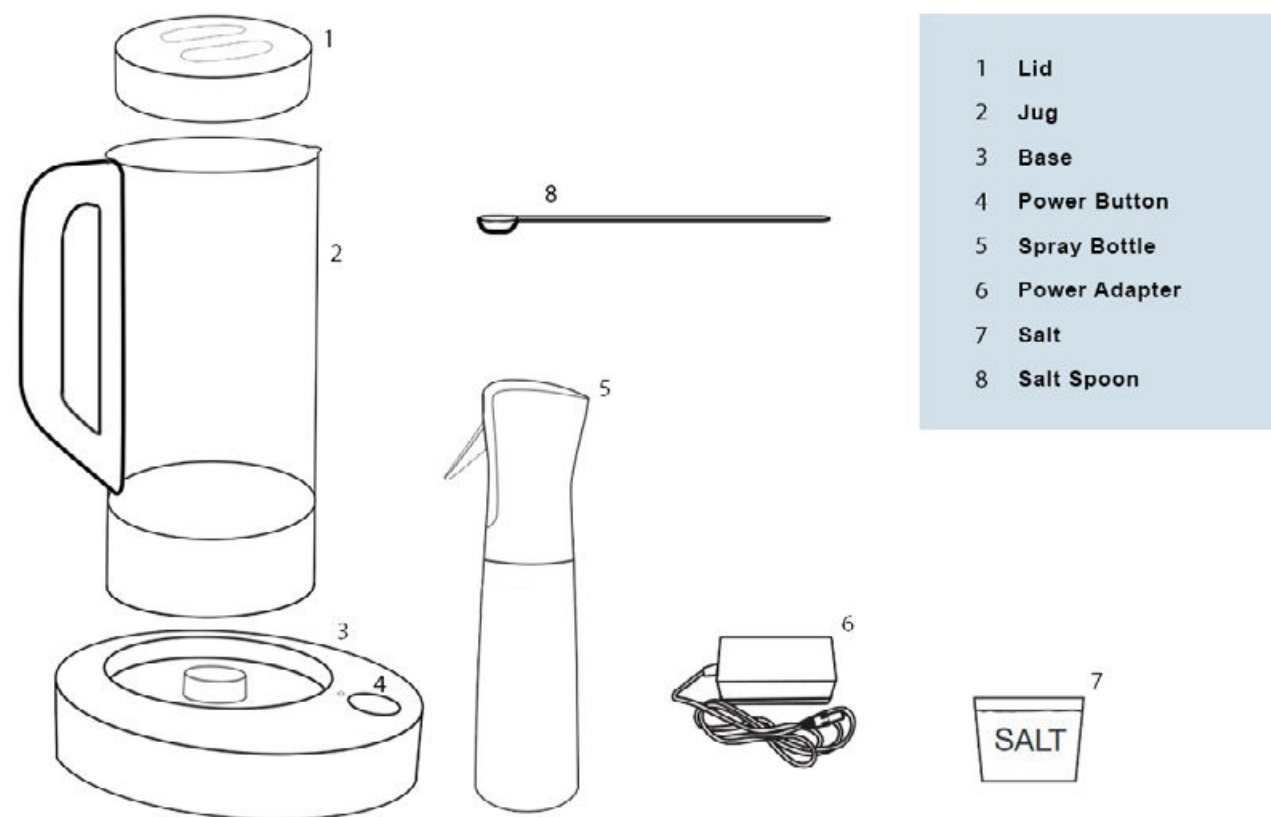
3.1 Parts Supplied with the Unit

- Jug with handle
- Jug base (Soft touch button for activation of solution)
- Transformer Power Supply
- Salt Measuring Spoon
- Fine Spray Bottle
- Long blue spoon for adding and mixing additives
- Quick start guide
- Internal boxes for packaging

3.2 Spray Dispenser

Fine mist spray delivers excellent coverage for a multitude of surfaces
Propellant-free continuous spray - large areas are covered quickly and evenly.

The following images of the product might be slightly different from the one supplied.



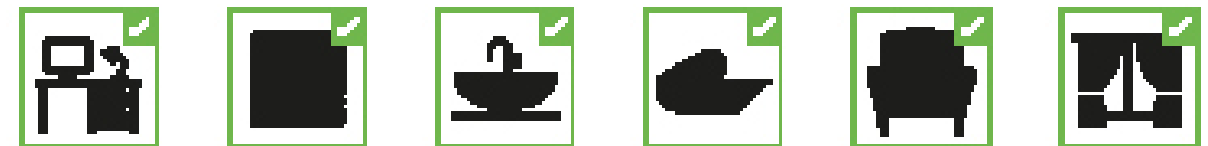
Salt does not come with the Centrego Renew but will be needed as part of the preparation process

4.0 Uses

4.1 Use

Centrego Renew disinfectant and cleaning solution is generated from salt dissolved in tap water, and activated in the Centrego Renew unit through Electro Chemical Activation.

Activation generates the active substances hypochlorous acid and sodium hypochlorite for easy home and commercial use to clean, disinfect and deodorise various goods and articles.



4.2 Usage

ECA solution can be used on all surfaces and then wiped off with a microfibre cloth. Take care when using on untreated wood, ensure all solution has been wiped off and the surface is dry.

ECA solution replaces all products that are design for the disinfection and cleaning of surfaces. ECA solution is not designed to de-grease.

4.3 Transportation

After testing and quality control, the Centrego Renew is packaged in a bespoke Centrego box with appropriate internal packaging to ensure safety during transportation.

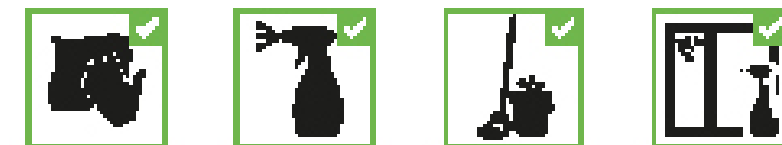
The Centrego Renew is designed to be relocated if needed. Before relocating the device, ensure that the machine is fully dry inside and out. This will ensure that no moisture comes into contact with the electrical power lead or plug. This also ensures that moisture does not come into contact with the cardboard box and packaging.

4.4 Storage of the device

If the device is not used for an extended amount of time make sure that the machine is dry and empty of liquid. Store and dry the device at a constant temperature and preferably in the original maker's box. Store with silica gel sachets inside the packaging if possible.

4.5 Storage of the solution

Once the solution has been produced, it is best to decant it into a spray bottle or bucket. If the solution is exposed to direct sunlight, it may be active for a few days. If the solution is protected from sunlight, it may remain active for much longer. Do not leave the solution in the Centrego Renew for longer than a few days.



5.0 Handling

5.1 Handling the product

- Ensure that the device is clean if not used for over 24 hours to reduce possible salt build-up
 - Use the recommended amount of salt per batch of ECA solution production
 - Do not use Rock Salt or salt tablets as the additive. Use use recommended salt.
 - If the unit does not work in the first instance, make sure you connect the power supply.
 - Do not overuse additives, and do not exceed the reference amount. Put additives and water into the brine tank and stir well to dissolve completely.
-
- It is not recommended to use this device more than three times in quick succession so that the electrics can cool down between uses.
 - DANGER - Do not get the plug adapter and cable wet in any way before, during or after use.
 - DANGER - Do not handle any electrical contact or power adapter with wet hands.

5.2 Handling when unpacking

- When unboxing the Centrego Renew take care not to tear the box or internal packaging so that this can be used in the future if storage is needed.



5.3 Handling when in use

- Ensure that your hands are free from moisture before touching the power cable and mains plug.
 - When handling the jug or pressing the button it is ok to have moisture on your hands although it is recommended that you dry your hand as much as possible when using the device.
-
- Do not drop or crush any parts of this device. Impact damage will not be covered by warranty.
 - Install the device at a sheltered location from the weather and extreme temperature changes.
 - Ensure all parts of the Centrego Renew are present before use.
 - Ensure all components are correctly connected before use.
 - When the jug is filled with liquid, it will become much heavier.
 - Take care when lifting the two-litre jug when it is full to protect personal safety.
 - Be careful not to drop any part of the Centrego Renew on any part of your body.

5.3 Handling when disposing of device

When the device has reached the end of its long life span, it is essential to dispose of all parts in the correct manner so that the machine and its part's and packaging are recycled in accordance to your local recycling laws.

If you cannot dispose of this device in an eco-friendly way, please send the device to the manufacturer so that it can be disposed of correctly.

	CAUTION - Do not use the device if it has been damaged in any way.
	DANGER - Do not use the power adapter or cable if there is damage or impact to the item.

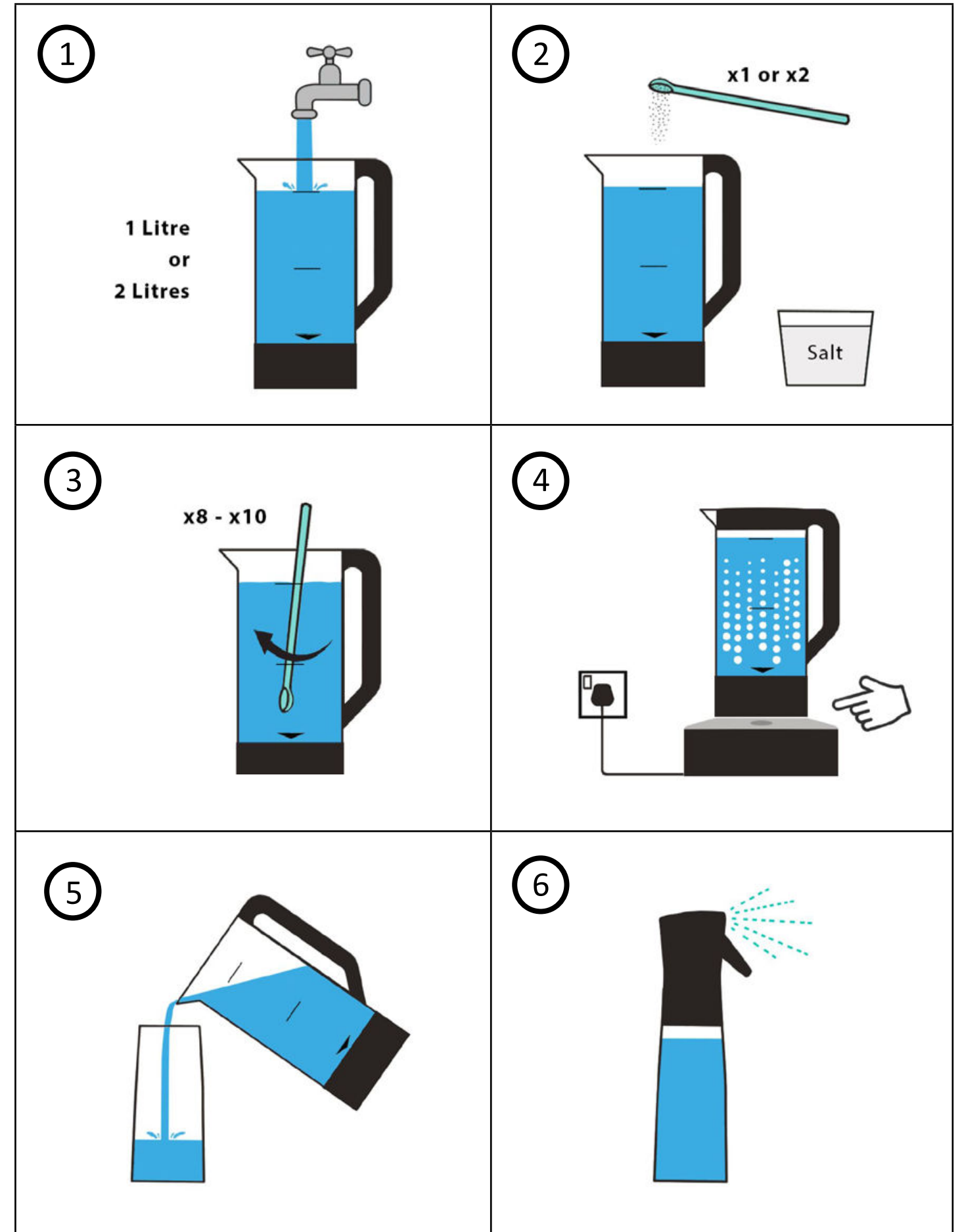
6.0 Operation

6.1 Step by step guide

<p>1) Fill the jug with tap water to either 1 or 2 litres (34 – 67 US fl oz) depending on the desired amount of activated solution to be generated. The water should be between 5 to 35C (41 to 95F).</p>
<p>2) Add 1 level spoon full of salt to 1 litres (34 US fl oz) or 2 level spoon full to 2 litres (67 US fl oz). Do not add more or less salt than recommended. Use recommended salt.</p>
<p>3) Stir the solution at least 8 – 10 times with the stirring spoon. Replace the lid after stirring with the emptying gap in the lid aligned to the jug spout.</p>
<p>4) Place the jug on the base and turn on at the power socket if needed. It will beep and the green light will show.</p> <p>Press the power button on the base once for a 4 minute activation for 1l (34 US fl oz) and 1 spoon of salt. A purple light will show at the bottom of the jug and on the base.</p> <p>Press the power button on the base twice for an 8 minute activation for 2l (67 US fl oz). A blue light will show at the bottom of the jug and on the base. The solution will go cloudy with micro-bubbles being generated.</p> <p>To cancel the activation, press the power button on the base and hold down for 4 seconds.</p>
<p>5) After the activation has finished, the bubbles will stop. There will be three beeps and the green light will flash. Wait until the green light has finished flashing before using the device again. Fill spray bottle with activated solution.</p>
<p>6) Pour the activated solution into either a spray bottle or a container to apply to surfaces or fabrics to clean and disinfect. The solution can also be used as a deodoriser.</p> <p>Before using the device again if the green light is not showing, press the power button once to put the unit on standby and the green light will show again.</p>

6.2 Breakdown graph

Volume	1L (2.11 US pints)	2L (4.22 US pints)
Activation time	4 mins	8 mins
Salt additive	4 grms (0.14 ozs)	8 grms (0.28 ozs)
Concentration ppm FAC	125ppm	250ppm



7.0 Trouble shooting

7.1 Page one of troubleshooting

Item	Issue	Possible Reason	Resolve
1	The device will not turn on and seems to have no power.	Supplied power adapter & cable is not plugged into the device. Supplied power adapter & cable is not connected to the powerpoint on wall. Power is not operational at the property.	Connect supplied power adapter & cable into the power point in the wall. Turn the on/off button to on if there is this button on your powerpoint. Connect the supplied power adapters cable into the base of the device and make sure that it is pushed in fully. Check that power is operational at property.
2	No bubbles rise in water during activation of ECA solution.	No salt has been added to the water before activation. The jug base does not have purple or blue light showing. No water in the jug.	Add salt and water to the jug before pressing button to make the solution. Press the button on the base to select correct colour to start the solution activation as per operation instructions.
3	The device won't make more solution when the Start Button is pressed after a previous activation cycle.	It is too soon since the last activation process.	Wait until the green light has stopped flashing, and then the device will be ready for another process.
4	Bubbles during production process is reduced.	There may be a build up of salt in the bottom of the jug.	Rinse out the jug with clean water and check that there is no salt in the base of the jug.

7.2 Page one of troubleshooting

Item	Issue	Possible Reason	Resolve
5	When the bubbles start the light inside the jug gets darker.	The bubbles make the light darker when the solution is being made.	There is no resolve as this is not an issue, it is normal.
6	Large bubbles randomly appear from the jug base during production and race to the top producing a popping sound.	The electrolysis process will produce many large and small bubbles in order to make ECA solution.	There is no resolve as this is not an issue, it is normal.
7	There is a salty residue on and around the device.	If salty water spills onto any surface, the water will evaporate, leaving a small layer of salt behind.	Use a slightly damp microfibre cloth to clean the surface. Make sure that the device is turned off during cleaning.
9	The device is missing a part from new.	A part might be hidden in a box or in the packaging inside the box.	Search inside each box and all of the packaging to find part.
9	ECA solution from the device has a slight smell of chlorine.	ECA solution smells like chlorine	There is no resolve as this is not an issue, it is normal.
10	There is fluid around the jug base.	If the liquid is spilt during the operation, the jug base has a drainage system so that the liquid can escape safely through the jug base onto the surface below.	This is normal if the jug is knocked slightly. Clean the fluid up with a microfibre cleaning cloth. Turn the machine off during cleaning.

8.0 Product Maintenance

8.1 Maintenance of the body

Wipe the body and inside of the jug with a warm damp cloth. Do not use any chemicals or detergent.

8.2 Dry and Storage

Store this product at room temperature or a cool, dry place after the moisture is removed completely from all parts of the device.

8.3 Cleaning the inside of the device

Wipe the inside of the jug with a warm damp cloth, add the water and salt and start the activation process. Do not separate the guard which protects the mesh electrode, and do not wipe it with excessive force.

8.4 Warranty

This product provides free after-sales during the one-year from your supplier. The After-Sales Service includes repair or replacement of some parts; however, the following conditions are not within the scope of after-sales.

- There is no purchase record.
- The Purchasing date and the store name are not stated.
- The customer disassembles the machine by themselves.
- The purchased product was damaged due to the delivery transport, not the product quality issues itself.
- The product failure is caused by peripheral equipment other than this product.
- Causes of natural disasters such as earthquakes and floods.
- Product failure is caused by not following manual instructions to operate.
- There is no basis or no way to confirm the problem.
- Salt damage gas damage (same as left) Malfunctions caused by salt, gas, and overrated power.
- The warranty does not cover the replacement of consumable parts. Please purchase the parts from the seller.

The jug is covered for one year under warranty for regular use - an average of 4x activations per day. The spray bottle spray head is covered for three months of use under normal conditions.

Replacements are available to purchase from your supplier or directly via:
www.centregold.com

For full details of the warranty in your particular country, please consult your local supplier. All claims must be conducted through your supplier.

9 Safety Information translated

9.1 English

English - keep out of reach of children. Always read the instructions carefully before use. This system and its accessories is designed to generate 1l (0.26 US gal, or 34 US Fl oz) to 2 litres (0.52 US gal or 67 US fl oz) of activated solution per batch using the salt measuring spoon supplied. Always use the electrical plug and adapter provided with the system – do not use alternatives or copies. contact provider for replacement power supply if required. Do not drink the contents. Always use the correct amount of salt: 4g (0.14 ounces) or 1 level spoon to 1l (0.26 US gal, or 34 US Fl oz) of water - 8g (0.28 ounces) or 2 level spoons to 2l litres (0.52 US gal or 67 US Fl oz) of water. Do not use any other additive. Make sure the base unit is always dry and positioned on a flat surface before use. A designated area should be used to generate the activated solutions. When not in use the Centrego Renew should be disconnected from the power source and stowed away. The activated Centrego Renew solution should not be left in direct sunlight otherwise it will degrade. always keep the jug lid on.

9.2 Espanol

Español - Mantener fuera del alcance de los niños. Siempre lea atentamente las instrucciones antes de usar. Este sistema y sus accesorios están diseñados para generar de 1 l (0,26 gal EE. UU. o 34 onzas líquidas estadounidenses) a 2 litros (0,52 gal EE. UU. o 67 onzas líquidas estadounidenses) de solución activada por lote utilizando la cuchara medidora de sal suministrada. Utilice siempre el enchufe eléctrico y el adaptador proporcionados con el sistema; no utilice alternativas ni copias. Póngase en contacto con el proveedor para obtener una fuente de alimentación de reemplazo si es necesario. No beba el contenido. Utilice siempre la cantidad correcta de sal: 4 g (0,14 onzas) o 1 cuchara al ras por 1 l (0,26 gal EE. UU. o 34 onzas líquidas estadounidenses) de agua - 8 g (0,28 onzas) o 2 cucharas al ras por 2 l 67 onzas líquidas estadounidenses) de agua. No use ningún otro aditivo. Asegúrese de que la unidad base esté siempre seca y colocada sobre una superficie plana antes de usarla. Se debe utilizar un área designada para generar las soluciones activadas. Cuando no esté en uso, Centrego Renew debe desconectarse de la fuente de alimentación y guardarse. La solución Centrego Renew activada no debe dejarse expuesta a la luz solar directa, de lo contrario se degradará. mantenga siempre la tapa de la jarra puesta.



9 Safety Information translated

9.3 Français

Français - Tenir hors de portée des enfants. Lisez toujours attentivement les instructions avant utilisation. Ce système et ses accessoires sont conçus pour générer 1 litre (0,26 US gal ou 34 US Fl oz) à 2 litres (0,52 US gal ou 67 US fl oz) de solution activée par lot à l'aide de la cuillère doseuse de sel fournie. Utilisez toujours la fiche électrique et l'adaptateur fournis avec le système - n'utilisez pas d'alternatives ou de copies. Contacter le fournisseur pour une alimentation électrique de remplacement si nécessaire. Ne buvez pas le contenu. Utilisez toujours la bonne quantité de sel : 4 g (0,14 once) ou 1 cuillère rase pour 1 litre (0,26 US gal ou 34 US Fl oz) d'eau - 8 g (0,28 once) ou 2 cuillères rases pour 2 litres (0,52 US gal ou 67 US Fl oz) d'eau. N'utilisez aucun autre additif. Assurez-vous que l'unité de base est toujours sèche et placée sur une surface plane avant utilisation. Une zone désignée doit être utilisée pour générer les solutions activées. Lorsqu'il n'est pas utilisé, le Centrego Renew doit être débranché de la source d'alimentation et rangé. La solution Centrego Renew activée ne doit pas être exposée à la lumière directe du soleil, sinon elle se dégradera. Gardez toujours le couvercle de la verseuse en place.

9.4 Italiano

Italiano - Tenere fuori dalla portata dei bambini. Leggere sempre attentamente le istruzioni prima dell'uso. Questo sistema e i suoi accessori sono progettati per generare da 1 l (0,26 US gal, o 34 US Fl oz) a 2 litri (0,52 US gal o 67 US fl oz) di soluzione attivata per lotto utilizzando il misurino di sale in dotazione. Utilizzare sempre la spina elettrica e l'adattatore forniti con il sistema - non utilizzare alternative o copie. Contattare il fornitore per la sostituzione dell'alimentatore, se necessario. Non bere il contenuto. Utilizzare sempre la quantità corretta di sale: 4 g (0,14 once) o 1 cucchiaino raso per 1 litro (0,26 US gal o 34 US Fl oz) di acqua - 8 g (0,28 once) o 2 cucchiaini rasi per 2 l (0,52 US gal o 67 US Fl oz) di acqua. Non utilizzare nessun altro additivo. Assicurarsi che l'unità base sia sempre asciutta e posizionata su una superficie piana prima dell'uso. Un'area designata dovrebbe essere utilizzata per generare le soluzioni attivate. Quando non è in uso, Centrego Renew deve essere scollegato dalla fonte di alimentazione e riposto. La soluzione di Centrego Renew attivata non va lasciata alla luce diretta del sole, altrimenti si degrada. tieni sempre il coperchio della brocca.

10 EU and UK Biocides Statement

Please note in Europe and the UK, you are recommended to use BPR 528/2012 compliant salt as precursor substance.

Compatible standards are:

EN 973 A, EN 973 B, EN 14805 TYP 1, EN 14805 TYP 2,
EN 16370 TYP 1, EN 16370 TYP 2, EN 16401 TYP 1, EN 16401 TYP 2.01 TYP 2)

It is the responsibility of the user of this system to ensure that local and national regulations relating to the products and their use are complied with and understood.

The end user confirms compliance with the regulations and assumes liability in the event of non-compliance.

Information on the biocide regulation compliance of Centrego Ltd products can be found on our

website:

www.acs-disinfection.com



Scan QR code to see the Centrego Renew training video



Centrego Renew By Centrego Ltd

Cleaning and Disinfection Generator
Manufactured for Centrego Ltd
Unit N4 Marshall Way, Frome, Somerset,
BA11 2FB, United Kingdom

EPA Est. No 88574-GBR-1

See Directions for Use in the Quick Start Guide and
in the online User Manual

Contents: Jug, base, spoon, spray bottle,
adapter plug & Quick Start Guide



Add salt to water and activate to produce ECA