



# COUNTERFOG® PILAR

## USER MANUAL SEPTEMBER 2021

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## 1. INTRODUCTION

### 1.1 SYMBOLS USED IN THIS MANUAL



**High risk!**

Disregarding can lead to death or heavy injuries!



**Medium risk!**

Disregarding can lead to death or heavy injuries!



**Low risk!**

Disregarding can lead to medium or light injuries!

#### INDICATION

It provides good advice for operating the device.

Disregarding can damage the device or produce underperformance.

### 1.2 DESCRIPTION

COUNTERFOG® PILAR is a **Fog-generating device for the rapid disinfection of buildings, indoor facilities, offices, vehicles, goods or objects.**

It provides a **dynamic fog cone** composed of sub-micrometric droplets of liquid which, when projected into the air, catch air-borne matter (dust, aerosols, spores, etc.).

Applying the cone with biocidal liquid, it rapidly removes biological agents deposited or attached on surfaces, whether they are floating in the air or are easily resuspendable.

Microparticles transported by the air or adhered to a surface, collapse with the droplets of liquid making them falling or detaching. The layer of liquid is extremely thin and evaporates in a few minutes, depending on the environmental conditions.

COUNTERFOG® PILAR can be used with any non-flammable liquid disinfectant depending on the purpose of each operation (See ANNEX I: DISINFECTANTS AUTHORIZED IN SPAIN).

## 2. USE

### **DANGER**

Carefully instruct all users of the device on how to operate it, its application purposes and the risks incurred.

Make sure this manual is read and understood by all users of the device.

### **CAUTION**

The device shall only be used by adults who have been carefully instructed on how to operate it and are well informed on possible dangers and risks incurred when using the device.

All users must always have a copy of this User Manual available when operating the device and have read and understood all specific indications stated on the label of the disinfectant used.

### 2.1 INTENDED USE

Counterfog® PILAR is intended for decontamination, disinfection and sanitization of buildings, indoor facilities, offices, vehicles, goods or objects.

### **WARNING**

**Risk of Damage!**

**Breathing fogs or mists of chemical substances or disinfectants may be toxic**

**Contact of chemical substances or disinfectants with skin, mouth or mucous must be avoided.**

Before using Counterfog® PILAR clear the zone removing all unprotected people, sensible objects or those incompatible with the liquid substance to be fogged.

Users must wear protective devices according to the substance selected. Typically, it will include a full-face mask with filters protecting against the chemicals used in addition to a specific protection against the biological agents present in the environment: protective suit, gloves and shoes.

Follow the safety instructions of the manufacturer of the liquid to be fogged.

- Users should familiarize themselves with Counterfog® PILAR operation by reading the User Manual prior to first use. It is essential that Counterfog® PILAR users follow all safety warnings as detailed in this operating manual.

- It is recommended that users read the entire document before proceeding with room disinfecting treatment.

## 2.2 LIQUIDS SUITABLE TO BE FOGGED

**Counterfog® PILAR can be used with different disinfectant liquids depending on the purpose of the operation.** Drinkable water -without microorganism- can be used to remove air-borne hydrophilic particulate matter from air.

For the cleaning of airborne biological agents and surfaces, it is recommended to use liquid disinfectants compatible with AISI 316L steel, Teflon and NBR. The compatibility of the disinfectant with the material in the treated area and the protective measures for people in the area must be taken into account. It is strictly forbidden to use flammable liquids that can produce explosive atmospheres in areas that are not classified with the corresponding ATEX index (DIRECTIVE 94/9/CE -ATEX 137- ) or mixing liquids if manufacturers do not recommend it.

Be sure that the nozzle, hose and pipes of the **Counterfog® PILAR** are empty and clean before filling the container with liquid.

Use only authorized liquid disinfectants suitable for spraying. Fogging enhances all the effects of chemical products.

Refer to the disinfectant manufacturer for the corresponding safety measures and equipment for individual protection corresponding to the fogged product.

**A mist of a flammable liquid should be considered an explosive atmosphere. Never spray a mist of flammable liquid on a flame, hot elements, sparks or any electrical devices.**



**Risk of Injuries!**

**Danger of explosion!**

**NEVER use flammable liquids!**

## 2.3 SAFETY AND CAUTION WARNINGS

- The device must be used in **full compliance with this operation and maintenance manual.**
- **It is strictly forbidden to use the device in an atmosphere with risk of explosion or flammability and in areas with the presence of people or animals. It is an imperative to prevent people from entering intentionally or inadvertently the room during the fogging process and during the waiting time thereafter.**

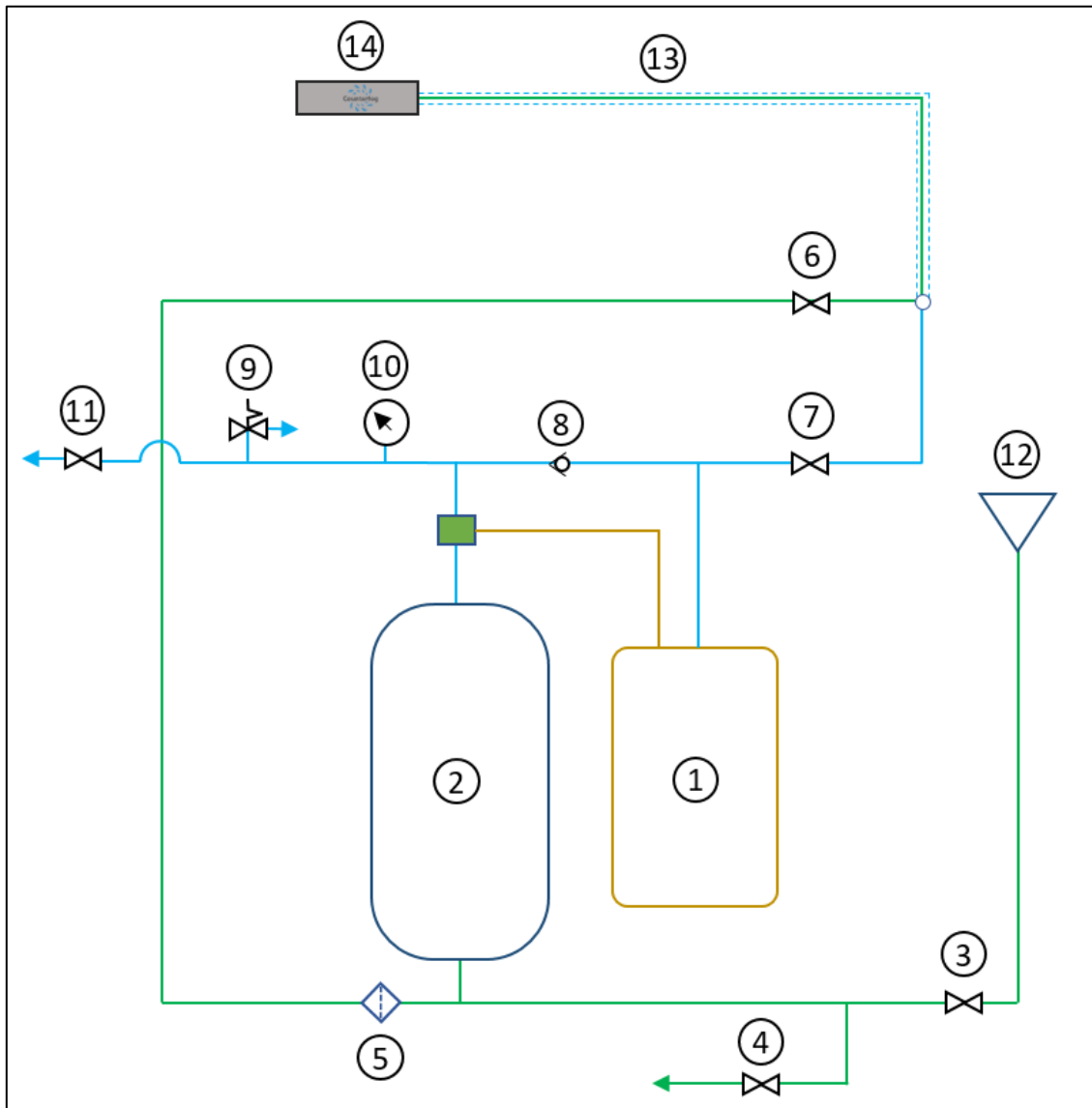
- The device can only be operated using the original power cord or a country-specific power cord with earthing cable. Before making electrical connections carefully check that the voltage supplied is compatible with the voltage marked on the device's data plate. Any electrical installation work must be carried out by qualified personnel.
- **Risk of injuries when using not authorized accessories!**
- **Use exclusively original accessories of COUNTERFOG EBT de la UAH S.L.**
- Place device on a stable, flat, dust-free, not slippery, horizontal surface, which can appropriately support its weight.
- Do not plug in if electrical plug or parts are wet. **High electric shock hazard.**
- Do not overfill the tank (always fill in with less than 3.9 liters [1.09 gal.]) as this can cause leakage and damage on electrical parts
- While in use, the body of the device may become warm to the touch. Handle with caution.
- **Keep out of reach of children**
- Used only as directed.
- Do not enter room while disinfectant is being fogged. Stay out of the room after treatment until room re-entry wait time has expired. Keep door and windows closed.
- Re-entry before the wait time has expired could result in sensory irritation and should only be done while using personal protection equipment (PPE)
- Avoid inhalation of vapors or skin and eye contact with disinfectant.
- Use PPE including wrap-around style goggles and gloves when filling disinfectant fluid into the tank. Avoid splashing or overfilling which could harm the user and the device.
- **COUNTERFOG EBT de la UAH S.L is not responsible for any injury or damage caused by using this device other than using the specific parameters detailed in this manual.**
- Store in an upright position in a safe, dry location. Do not place anything on top of the device.

## 2.4 AUTHORIZED PERSONS

**The device shall only be used by adults who have been carefully instructed on how to operate it and are well informed on possible dangers and risks incurred when using the device.**

The users must always have a copy of this Operation Manual at their disposal when operating the device and have read and understood all specific indications stated on the label of the concrete disinfectant used.

## 2.1 COMPONENTS

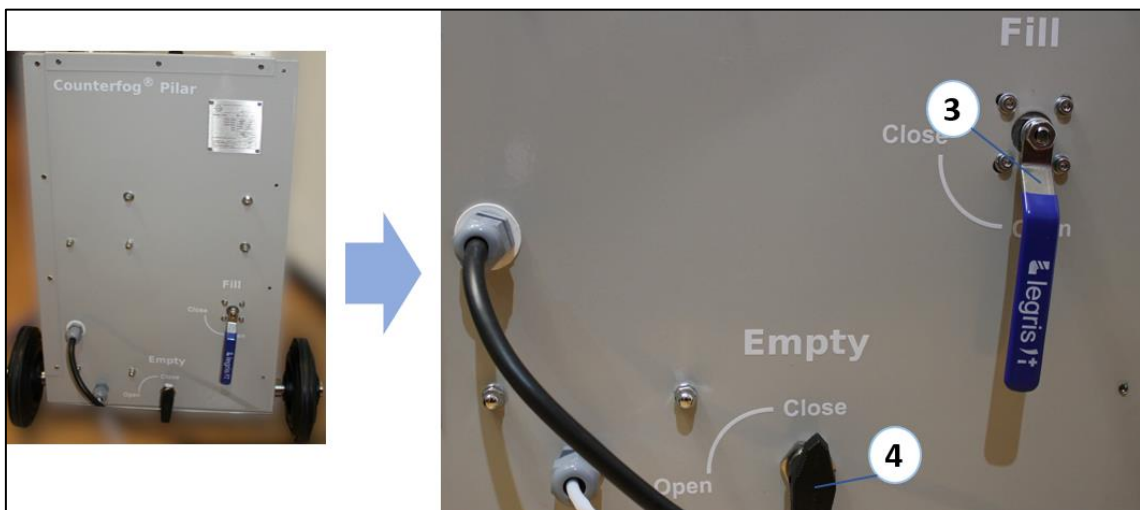
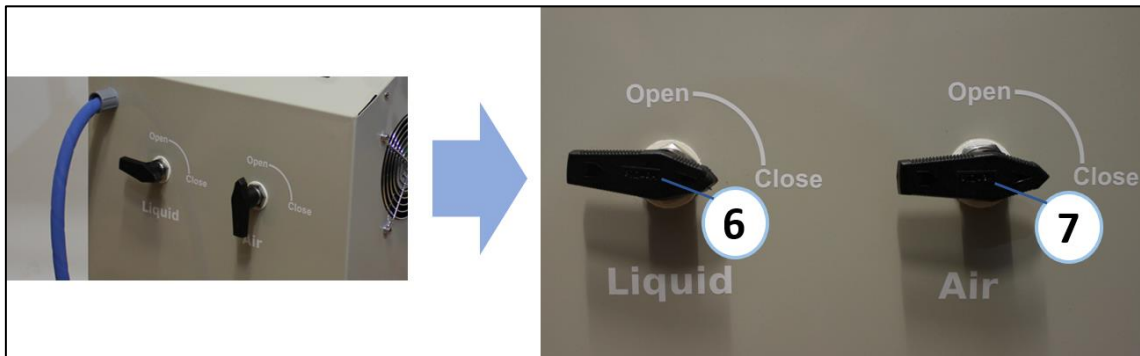
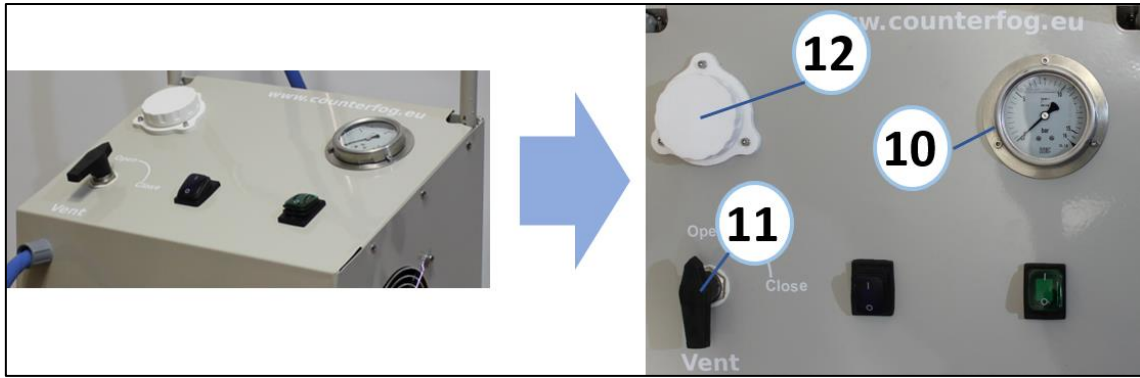


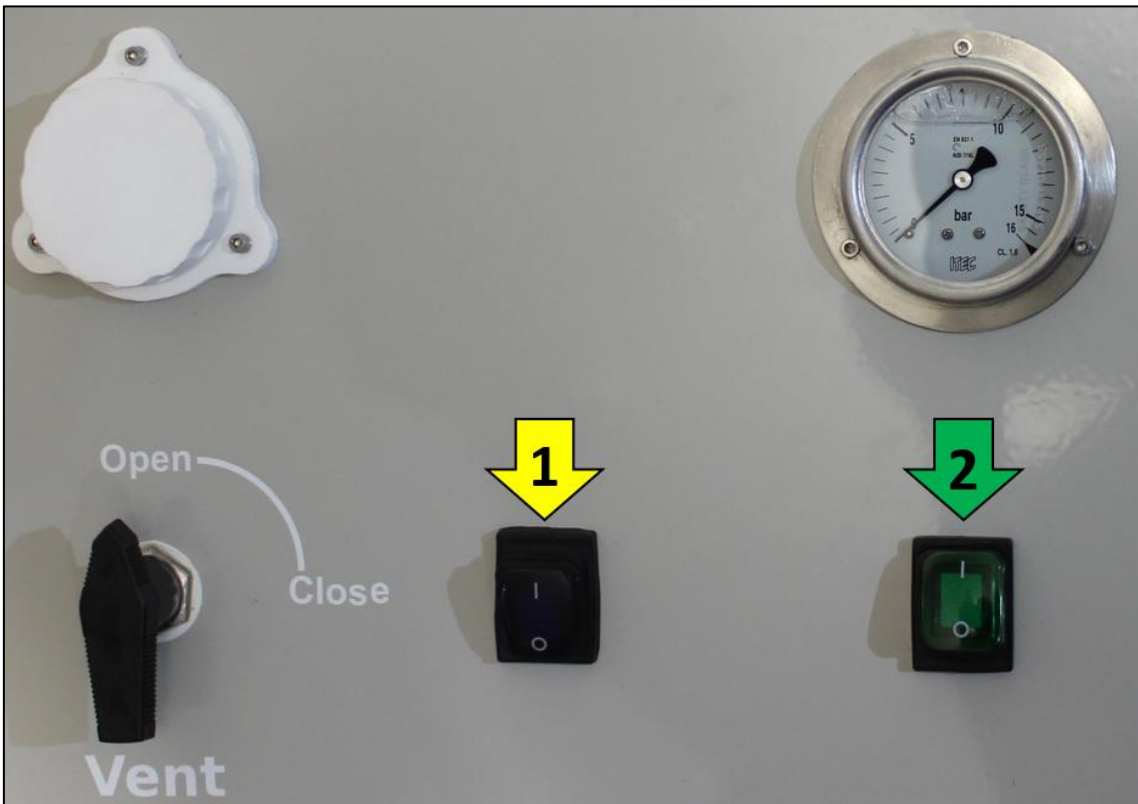
Part	Name
1	Compressor
2	Pressure tank
3	“FILL” (Filling valve)
4	“EMPTY” (Drain valve)
5	Filter

6	"LIQUID" (Liquid valve)
7	"AIR" (Air valve)
8	Check valve
9	Safety valve
10	Pressure gauge
11	"VENT" (Vent valve)
12	Filling
13	Coaxial hose
14	Counterfog® F1/6 Nozzle for massive nanometric fog generation









### 3. RECOMMENDED PERSONAL PROTECTION EQUIPMENT (PPE)

Individual Protection Equipment must be selected according to the liquid to be fogged. **Please consult the indications of the liquid producer** and your Health & Safety responsible.

General **recommended Personal Protection Equipment** will include the following :

- Respirator full face mask with CB filter BLS 5000.
- Coveralls Tychem® F. Combination of chemical and biological protection.
- Vinyl Gloves.
- Security shoes
- CB Protective covers for shoes.
- Earplugs or other ear protectors.

### 4. ROOM PREPARATION

**Counterfog® PILAR** can disinfect air, clothes and surfaces with a scarce amount of disinfectant liquid. Surfaces must be exposed to air.

For a full disinfection remove bed covers. Clothes and objects that should be disinfected separately.



**Depending on the disinfectant to be used, evacuation of any person with no Personal Protection Equipment will be mandatory.**

Provide PPE to any person staying in the room or space while disinfection operation is in progress.

#### INDICATION

Fire smoke detectors will usually detect the mist generated by your **Counterfog® PILAR**. Before disinfection, turn off your fire alarm device.

Do not forget to turn it on again after the whole disinfection operation is over.

Depending on the Heat, Air Conditioning and Ventilation (HVAC) system in operation, it may be necessary to turn it off during disinfection. Alternatively, **Counterfog® PILAR** can be used to disinfect HVAC systems and conduits. (Do not use sodium hypochlorite for copper coil heat exchangers or fan coils)

Open internal doors, cupboards and drawers of room furniture unless is specifically indicated to leave them closed.

Remove mattresses from beds and tilt them on their sides.

**Assure all personnel have evacuated the room before fogging.**

Remove plants, animals, beverages and food.

Close windows and doors of the room.

All entrances to the treatment room must be placarded. Placards must be placed in advance of the treatment in order to keep unauthorized persons from entering the room

## 5. OPERATING INSTRUCTIONS

### 5.1 POSITION

Place device on a stable, flat, dust-free, not slippery, horizontal surface which can appropriately support its weight.

### 5.2 FILLING

**Counterfog® PILAR** must be used only with approved disinfectants. Please refer to point 2.2 LIQUIDS SUITABLE TO BE FOGGED and ANNEX 1 to verify the disinfectants authorized in Spain.

- **Unplug the equipment** from the electrical line
- Double check that all elements are well tight and there are no mechanical damages or bumps.



**The tank may be pressurized**

- Check **all valves (3 "FILL", 4 "EMPTY", 6 "LIQUID", 7 "AIR" and 11 "VENT") are closed.**
- The **two switches** at the top of **Counterfog® PILAR** must be **OFF**.
- Carefully open the vent valve (**Open 11 "VENT"**).
- Wait until pressure in the tank is the atmospheric (no air flows out at that time).
- Open the filling valve (**Open 3 "FILL"**) and **double check that valve 4 "EMPTY" is closed.**
- Carefully unscrew the cap from the funnel (**unscrew 12**) and leave the cap in a suitable place.
- Pour the liquid into the funnel following the manufacturer's recommendations. Make sure that the amount poured is always less than 3.9 liters [1.09 gallons (US)].

- If the new disinfectant is not compatible with the previous one, then the tank should be filled with water or an adequate solvent and emptied the (see 9. END OF OPERATION).
- Disinfectant liquids usually need to be diluted in water (following the instructions of the disinfectant manufacturer). You can fill your **Counterfog® PILAR** with the diluted solution or alternatively to fill it with the several components according to the corresponding proportions.

 **CAUTION**

**Always wear gloves and safety glasses when filling the tank!**

**Do not overfill! This will damage the device.**

- When finish pouring the liquid, close the filling valve ([Close 3 “FILL”](#)).
- Screw the cap to the funnel ([screw 12](#)).
- Close and lock the vent valve ([Close 11 “VENT”](#)).

### 5.3 POWER CONNECTION

 **CAUTION**

**Before making electrical connections carefully check that the voltage supplied is compatible with the voltage marked on the data plate and that there are shortcut and overcurrent as well as current default protections in service**

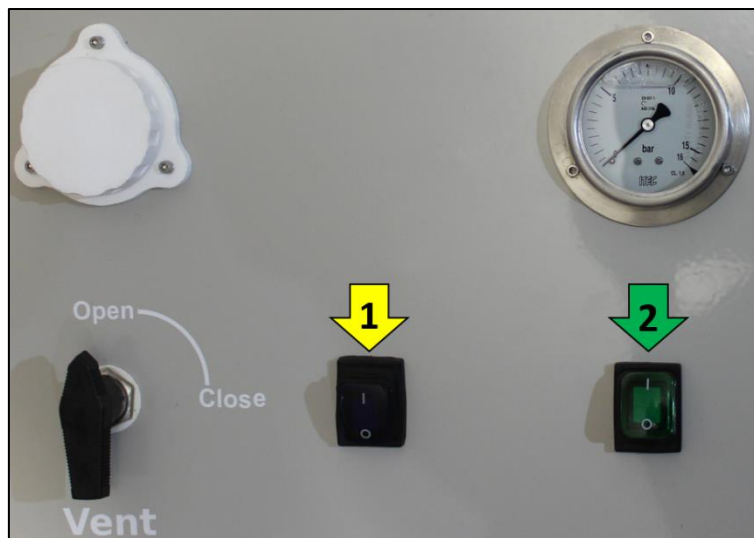
- Double check all valves (3 “FILL”, 4 “EMPTY”, 6 “LIQUID”, 7 “AIR” and 11 “VENT”) are closed.
- Double check the **two switches** at the top of **Counterfog® PILAR** are **OFF**.
- **Plug the equipment** to the 120 V/60 Hz supply line.

### 5.4 SWITCH ON AND PRESSURIZATION OF TANK

- Activate the switch on the left ([Activate switch 1](#)) (**yellow arrow in the figure**) which activates the fan.
- Activate the switch on the right ([Activate switch 2](#)) (**green arrow in the figure**) which activates the compressor.

**INDICATION**

Please, follow the correct order of activation of the switches.



- Wait until the pressure gauge (**check pressure gauge 10**) indicates Counterfog® PILAR has been pressurized to 11 bar.



**Counterfog® PILAR** is programmed to **automatically provide a pressure of 11 bar** -Check pressure gauge (**check 10**)-.

## 5.5 OPERATION

- Double check **all valves (3 “FILL”, 4 “EMPTY”, 6 “LIQUID”, 7 “AIR” and 11 “VENT”) are closed.**
- Hold firmly the hose by the nozzle (**hold 14**) pointing at the floor.
- Open the air valve (**Open 7 “AIR”**).
- Open the liquid supply valve (**Open 6 “LIQUID”**).
- Proceed to disinfection.



### INDICATION

**Droplets smaller than 1 micrometer are not visible to the human eye.**

### CAUTION

**Risk of Injuries!**

**This device jets fogged chemical substances**

**Do not inhale these substances.**

## 6. ROOM DISINFECTION

**Counterfog® PILAR** disinfects both air and surfaces. For an effective operation, the user must gently aim corners from one side to the other, from the upper to the lower parts.

The fog cone must be ejected under and behind furniture.

All directions in the room must be swept. A few minutes should be enough to disinfect a standard-sized room.

After the disinfection process, the disinfected surfaces will be "slightly moist".

## 7. PAUSE

Disinfection can be paused just closing the liquid supply valve ([Close 6 “LIQUID”](#)) and the air valve ([Close 7 “AIR”](#)) in this order.

 **WARNING**

**It is crucial to follow the steps in the correct order**

If after the pause you want to continue the disinfection, follow (in order) the next steps:

 **WARNING**

**It is crucial to follow the steps in the correct order**

- Hold the hose firmly by the nozzle ([hold 14](#)) pointing at the floor.
- Open the air valve ([Open 7 “AIR”](#)).
- Open the liquid supply valve ([Open 6 “LIQUID”](#)).
- Proceed to disinfection.

## 8. END OF OPERATION

When wanted to finish disinfection, follow (in order) the next steps.

 **WARNING**

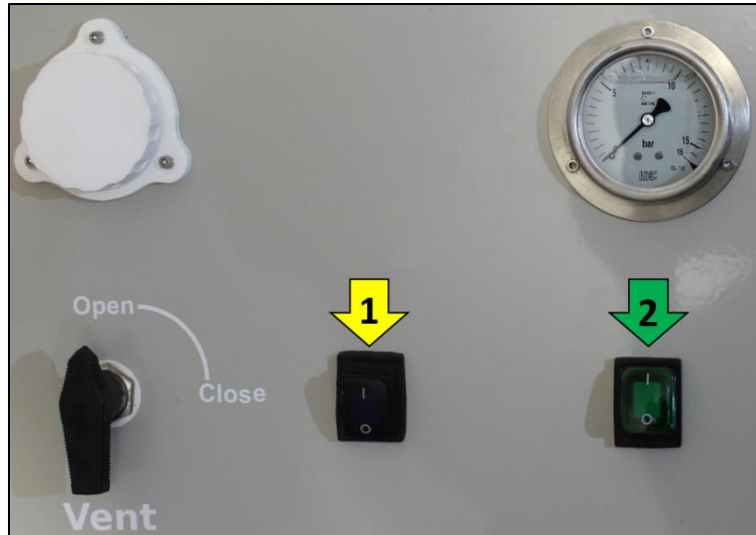
**It is crucial to follow the steps in the correct order**

- Close the liquid supply valve ([Close 6 “LIQUID”](#)).
- Close the air valve ([Close 7 “AIR”](#)).
- Deactivate the switch on the right ([deactivate switch 2](#)) (**green arrow in the figure**) which deactivates the compressor.
- Deactivate the switch on the left ([deactivate switch 1](#)) (**yellow arrow in the figure**) which deactivates the fan.

**INDICATION**

**Please, follow the steps in the correct order**



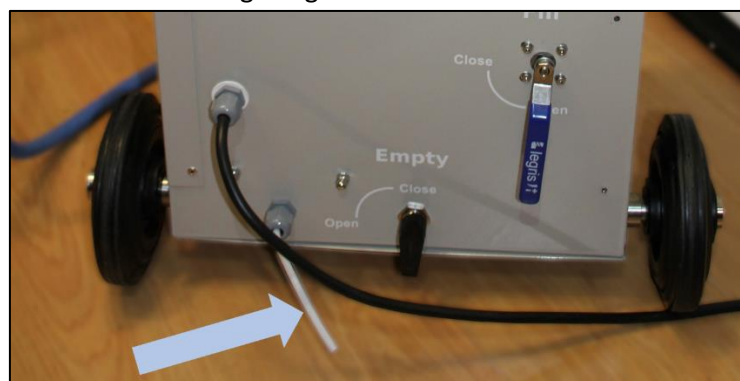


**Counterfog® PILAR** can be then unplugged, moved to another room and plugged again. The tank will remain pressurized.

- **Unplug the equipment** from the 120 V/60 Hz supply line.

To end the operation, unplug the **Counterfog® PILAR** device, move it to a safe place and proceed to depressurization:

- Double check **all valves (3 "FILL", 4 "EMPTY", 6 "LIQUID", 7 "AIR" and 11 "VENT") are closed.**
- Carefully release and open the vent valve (**Open 11 "VENT"**). Wait until pressure in the tank becomes the atmospheric (no air flows out at that time).
- To evacuate the remaining liquid from **Counterfog® PILAR**, place a suitable container (compatible with the disinfectant) under the device since the residual disinfectant will come out through the Teflon hose indicated in the following image.



- Open valve 4 (**open 4 "EMPTY"**) and the liquid is evacuated.



**Always wear gloves and safety glasses when evacuating the residual liquid from the device!**

- When finish evacuating liquid, close valve 4 (**close 4 "EMPTY"**).

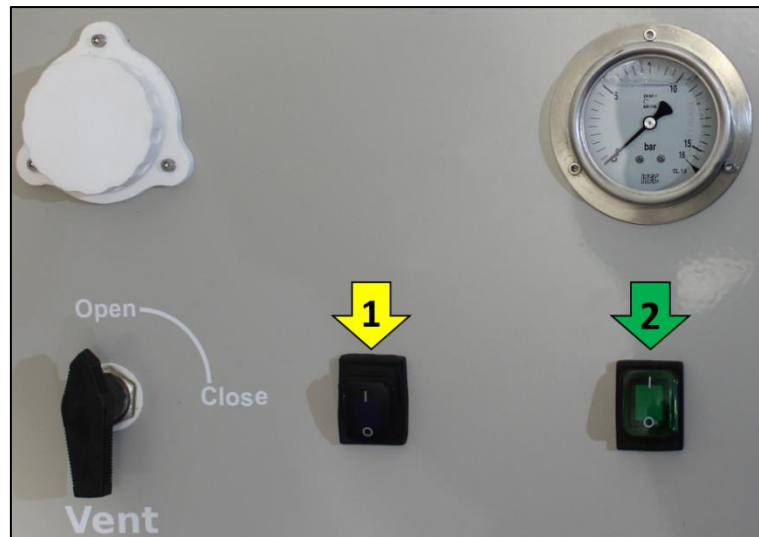
### INDICATION

If any type of disinfectant has been used, please go to next indication. Otherwise, follow the next procedure to dry the tank. Remember that a correct maintenance lengthen the durability of the product.

- Open the filling valve (**Open 3 “FILL”**), open the empty valve (**OPEN 4 “EMPTY”**) and open the vent valve (**OPEN 11 “VENT”**). Check the other valves remain closed (**6 “LIQUID “and 7 “AIR” closed**).
- **Plug the equipment** to the 120 V/60 Hz supply line.
- Activate the switch on the left (**Activate switch 1**) (**yellow arrow in the figure**) which activates the fan.
- Activate the switch on the right (**Activate switch 2**) (**green arrow in the figure**) which activates the compressor.

### INDICATION

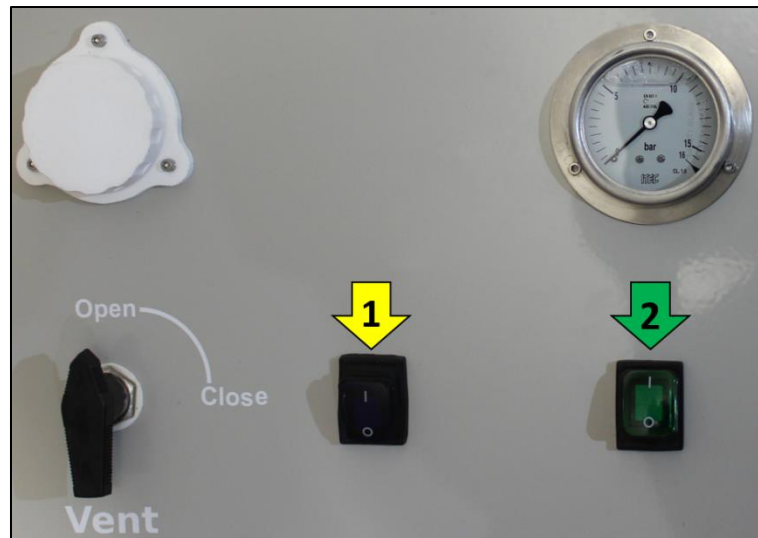
Please, follow the correct order of activation of the switches.



- **Wait for 12 minutes** to remove the moisture of the pressure tank.
- Deactivate the switch on the right (**deactivate switch 2**) (**green arrow in the figure**) which deactivates the compressor.
- Deactivate the switch on the left (**deactivate switch 1**) (**yellow arrow in the figure**) which deactivates the fan.

### INDICATION

Please, follow the correct order of activation of the switches.



- Close all valves (3 “FILL”, 4 “EMPTY”, 6 “LIQUID”, 7 “AIR” and 11 “VENT” closed).
- Unplug the equipment from the 120 V/60 Hz supply line.

## INDICATION

If any type of disinfectant has been used, follow the next procedure to dry the tank. Remember that a correct maintenance lengthen the durability of the product.

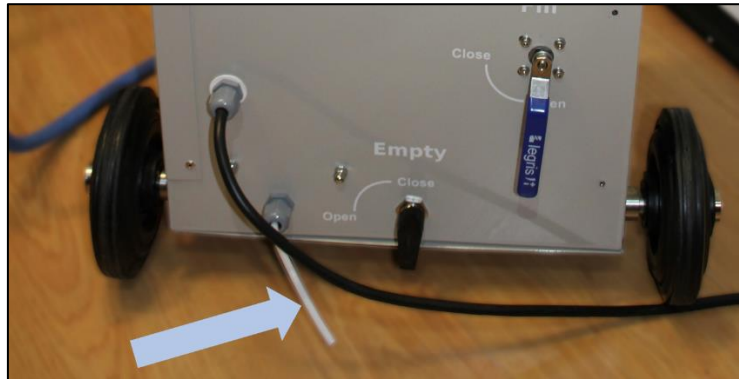
- Unplug the equipment from the electrical line
- Double check that all elements are well tight and there are no mechanical damages or bumps.

### CAUTION

**The tank may be pressurized**

- Check all valves (3 “FILL”, 4 “EMPTY”, 6 “LIQUID”, 7 “AIR” and 11 “VENT”) are closed.
- The **two switches** at the top of Counterfog® PILAR must be OFF.
- Carefully open the vent valve (Open 11 “VENT”).
- Wait until pressure in the tank is the atmospheric (no air flows out at that time).
- Open the filling valve (Open 3 “FILL”) and double check that valve 4 “EMPTY” is closed.
- Carefully unscrew the cap from the funnel (unscrew 12) and leave the cap in a suitable place.
- Fill your Counterfog® PILAR with **1 liter of drinkable water** (0.26 gallons).

- Tilt the **Counterfog® PILAR** slightly to both sides so as to drinkable water is being mixed with the remaining disinfectant in the walls of the device.
- To evacuate the remaining liquid from **Counterfog® PILAR**, place a suitable container (compatible with the disinfectant) under the device since the residual disinfectant will come out through the Teflon hose indicated in the following image.



- Open valve 4 ([open 4 “EMPTY”](#)) and the liquid is evacuated.

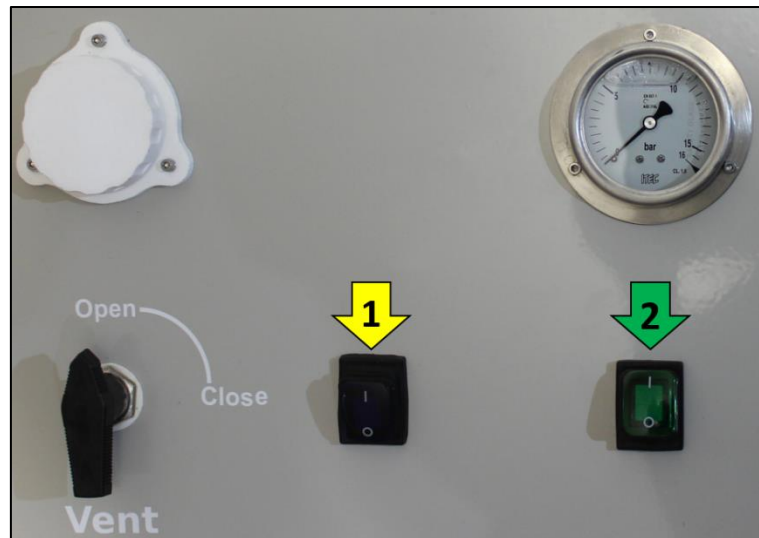
### CAUTION

**Always wear gloves and safety glasses when evacuating the residual liquid from the device!**

- When finish evacuating liquid, close valve 4 ([close 4 “EMPTY”](#)).
- Screw the cap to the funnel ([screw 12](#)).
- Open the vent valve ([Open 11 “VENT”](#)).
- Open the filling valve ([Open 3 “FILL”](#)), open the empty valve ([OPEN 4 “EMPTY”](#)) and check the other valves remain closed ([6 “LIQUID “and 7 “AIR” closed](#)).
- [Plug the equipment](#) to the 120 V/60 Hz supply line.
- Activate the switch on the left ([Activate switch 1](#)) (**yellow arrow in the figure**) which activates the fan.
- Activate the switch on the right ([Activate switch 2](#)) (**green arrow in the figure**) which activates the compressor.

### INDICATION

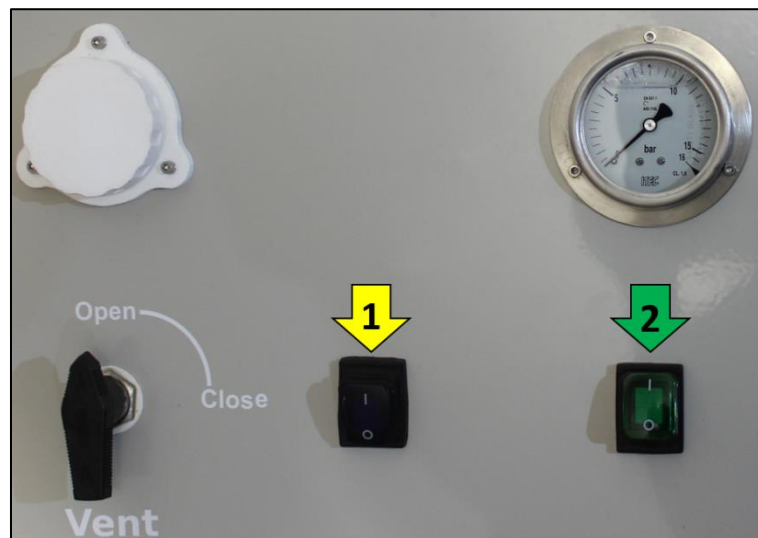
Please, follow the correct order of activation of the switches.



- **Wait for 12 minutes** to remove the moisture of the pressure tank.
- Deactivate the switch on the right (**deactivate switch 2**) (**green arrow in the figure**) which deactivates the compressor.
- Deactivate the switch on the left (**deactivate switch 1**) (**yellow arrow in the figure**) which deactivates the fan.

### INDICATION

Please, follow the steps in the correct order



Counterfog® PILAR can be then unplugged, moved to another room and plugged again.

- **Unplug the equipment** from the 120 V/60 Hz supply line.
- Close all valves (**3 "FILL", 4 "EMPTY", 6 "LIQUID", 7 "AIR" and 11 "VENT" closed**).
- **Unplug the equipment** from the 120 V/60 Hz supply line.

 **CAUTION**

After disinfection, depending on the kind of disinfectant used, venting is mandatory. People can enter the room only when the fog is dissipated.

Do not forget to turn on the Fire Detection System of the facility again after the whole disinfection operation is over.

## 9. OTHER CAUTIONS

- **Keep out of reach of children**
- Carefully read all instructions, warnings, cautions and first aid statements prior to use.
- Do not enter room while **Counterfog® PILAR** is in use. Keep door and windows closed.
- Use only as directed.
- Avoid inhalation of vapors or skin and eye contact with disinfectant liquid.
- Electric shock hazard. Do not plug in if electrical plug or parts are wet.
- While in use, the bottom of the device may become warm to the touch. Be careful.
- Use Personal Protection Equipment PPE including wrap-around style goggles and gloves when filling the tank. Avoid overfilling which could harm the user and/or the compressor.
- Position the **Counterfog® PILAR** on a secure surface to prevent rolling or moving while in use.
- Protect this device from severe impact or shock.
- Do not tip the **Counterfog® PILAR** on its side at any time unless completely empty and dry.

## 10. TROUBLESHOOTING

Anomaly	Possible Cause	Solution
<b>Device does not work</b>	Check power supply	Ensure power supply to device
	Check correct insertion of the plug	
<b>Fog is not generated</b>	Tank is empty Nozzle is clogged	Fill the tank with liquid Refer to maintenance manual

<p><b>Device emits loud noises</b></p>	<p>Possible internal damages Presence of foreign bodies in the compressor</p>	<p>Switch off and unplug device, call technical service</p>
<p><b>Device leaks liquid</b></p>	<p>Possible internal damages Internal piping rupture or connections leaking Device was tipped on its side without completely empty.</p>	<p>Switch off and unplug device, open device and remove water. Let device completely dry. If device still leaks call technical service</p>
<p><b>Device leaks from the cap</b></p>	<p>mistake when activating / deactivating the valves</p>	<p>Switch off and unplug device, remove remnants water. Extract the liquid inside following the instructions in this manual. Let device completely dry. Wipe the outer parts of the device with a cloth. If device still leaks call technical service</p>

## 11. WARRANTY

**COUNTERFOG EBT de la UAH S.L** warrants that the Products meet the above specifications and will be delivered free of defects with respect to materials and workmanship

- Excluded from this warranty are parts that are subject to natural wear & tear as well as consumable parts (e.g., air filter, water filter, hoses, and valves).

- The warranty for Products will be extinguished after two (2) years from the date of shipment. With respect to elements subject to mechanical wear, such as, but not limited to, bonds, pipes or other similar elements (6) months. Once these deadlines have elapsed, no claims or refunds of any kind will be accepted for this reason.

If the Products do not comply with the foregoing warranties, COUNTERFOG shall, at its option, repair or replace the defective Products, provided that Buyer notifies COUNTERFOG in writing, prior to the end of the warranty period, and within fifteen (15) days of the discovery of the anomaly or defect. The repair, replacement or new warranty service by COUNTERFOG shall not extend or renew the corresponding warranty period.

- Buyer shall obtain COUNTERFOG's approval of the specifications of any tests it intends to conduct to determine whether there is a non-conformity. COUNTERFOG may, in any case and in advance, check defects caused by the means it deems appropriate, without the Purchaser being able to hinder the actions of the persons designated by COUNTERFOG to verify such non-conformity.

- COUNTERFOG shall not accept, for a period longer than six (6) months, those Used Products owned by the Purchaser, which at the latter's will have been deposited in COUNTERFOG's premises. After the last period, COUNTERFOG shall be entitled to dispose of them at his option.

- This warranty is available to the original purchasers only and cannot be transferred or assigned. If during the warranty period a default on the device should be noted, please proceed as follows: (i) Call COUNTERFOG EBT de la UAH S.L (ii) Prepare the shipment of the device back to COUNTERFOG EBT de la UAH S.L and the original invoice .Please note that the device should be packed in the original shipping box. Should this not be the case the device will not qualify for the above explained warranty service and will be repaired or replaced at customers' expenses. COUNTERFOG EBT de la UAH S.L will not absorb shipping costs associated with the returns.

- The Warranty shall not cover (a) any defects and/or malfunctions caused by the storage, installation, commissioning, use, or maintenance performed by the Purchaser or third parties (b) any defects and/or malfunctions caused by amphibians, insects, rodents, birds and/or mammals (c) those defects and/or malfunctions caused by obstructions not attributable to a manufacturing defect (d) those defects and/or malfunctions caused by incoming water or other added elements that do not comply with the physical/chemical and/or biological parameters recommended upon and/or



indicated to the Purchaser and used for the design of the Product (e) those defects and/or malfunctions caused by the use of consumables other than those authorized by COUNTERFOG in writing (f) those defects and/or malfunctions caused by inadequate operating conditions other than the intervals or parameters indicated by COUNTERFOG. By way of example but not limited to, working pressure conditions, water source quality, electrical supply voltage and/or exposure conditions to aggressive environments (g) those defects and/or malfunctions caused by the handling of the equipment (h) those defects and/or malfunctions caused by winds greater than 27 m/s constantly, winds, swirls, hurricanes, tornadoes, snow or hail loads greater than 20kg/m<sup>2</sup>, torrential or strong intensity rains (i) those repairs, modifications or alterations made by the Purchaser or by personnel outside COUNTERFOG, without the written consent of COUNTERFOG, and/or those repairs, alterations or modifications made without following the instructions given by COUNTERFOG (j) repair of the damage or damage from the use of the Products in places, environments, or purposes, in which there are no adequate factors, conditions or characteristics to obtain optimal performance of the Product (k) normal wear and tear of the Products (l) those losses and/or damage to the property or persons, related to the installation, commissioning, use and/or maintenance of the Products/Services performed by the Purchaser or by third parties (m) damage to the systems or equipment in which the Products are integrated, during defective operating periods (n) damage and defects attributable to incidental or force majeure (o) those losses and/or damage caused by inadequate operating conditions, outside the intervals or parameters indicated by COUNTERFOG.

-The warranty shall not cover any travel, labor, or other costs of the access costs necessary to carry out the rectification work under COUNTERFOG's warranty (including the removal or replacement of parts and materials, structures or other parts of the Buyer's premises), assembly/disassembly, decontamination, and installation/re-installation.

- COUNTERFOG EBT de la UAH S.L and its authorized Dealers assume no liability for any damage, accident, injury, death, loss or other claim related to or resulting from the use of the device. In no event shall they be held liable for incidental or consequential damages relating to or resulting from the use of the device, any of its parts or accessories.

## 12. DISCLAIMER

This clause sets forth exclusive rights and actions in connection with all claims based on failures or defects of the Products, regardless of when the judgment or defect appears and whether or not a claim, whatever its description, is based on contract, warranty, indemnification, non-contractual liability (including negligence), or any other liability. The warranties provided in this clause supersede all other written, verbal, tacit or legal warranties and conditions. COUNTERFOG will not accept more warranty terms than those set forth herein.

-COUNTERFOG shall not respond or be deemed to violate its obligations under the Contract when the product defect is hindered or ceases to function, directly or indirectly, for a cause beyond its reasonable control. By way of example, but not limited to; for weather reasons, for reasons attributable to shipping companies, unavailability of port storage space, armed conflict, acts or threats of terrorism, epidemics, strikes or other labor disputes or acts or omissions of a State authority or Buyer or Buyer's contractors or suppliers.

-COUNTERFOG's total liability for all claims of any class arising out of or relating to the conclusion, performance or breach of the Contract, or for any Product or Service shall not exceed the Contract Price.

-Under no circumstances shall COUNTERFOG be liable for loss of profit, loss of use of the Product, loss of time, loss of profits, business interruption, cost of substitute energy, cost of capital,

inactivity costs, increases in operating costs and/or third-party claims against the Purchaser.

- All liability of COUNTERFOG shall terminate with the expiration of the corresponding warranty period. However, where Buyer may continue to execute a claim that has been notified prior to that date initiating a legal action or arbitration, as applicable under this Agreement, prior to the termination of any limitation rule or other legal time limitation, but under no circumstances after one year of the end of such warranty period.

This Agreement shall be governed by and construed in accordance with the laws of the Spanish State.

All disputes arising in connection with the Contract, including matters relating to its existence and/or validity, shall be subject to the jurisdiction of the Valdemoro (Madrid-Spain) Courts and Tribunals.

## 13. DISPOSAL AND DECOMMISSIONING

Disposal should be done respecting the environment and local recycling rules. The dismantling of the device must be done by specialized companies. The device is built with recyclable materials.

### 13.1 DISPOSAL IN EU COUNTRIES



To preserve and protect the environment, to prevent environmental pollution and to improve the recycling of raw materials, a directive was issued by the European Commission, which states that all electrical and electronic appliances have to be taken back by the manufacturer in order to dispose them properly or to make them available for recycling. Within the European Union the devices marked with the symbol below may therefore not be disposed of together with unsorted municipal waste

Please check with your local authorities for proper disposal.

## ANNEX I: DISINFECTANTS AUTHORIZED IN SPAIN

As a result of the health emergency, the Government of Spain declared a state of alarm in accordance with Royal Decree 463/2020, published on March 12, 2020, due to the spread of the pandemic generated by the SARS-CoV-2 coronavirus. In this context, there is a recommendation to disinfect surfaces to stop the transmission of the virus between people. Therefore, below are the viricide products authorized and registered in Spain that have proven effective against viruses in accordance with the UNE-EN 14476 standard. Antiseptics and chemical disinfectants. Quantitative test of viricide suspension of chemical antiseptics and disinfectants used in medicine (List of Viricides authorized in Spain for environmental use (TP2) and food industry (TP4))

Commercial name	Surfaces	Equipment	Air	Air conditioning equipment and conducts	Fabrics
<b>RELY+ON VIRKON</b>	x	x	x		
<b>OX-VIRIN</b>	x	x	x		
<b>SANITAS PROCSAN</b>	x	x	x		
<b>SANYTOL HOME AND FABRIC DISINFECTANT</b>	x	x			x
<b>OX-VIRIN READY TO USE</b>	x	x	x		
<b>SANOSIL S010</b>	x	x	x	x	
<b>AMBIDOX 25</b>	x	x	x	x	
<b>OXA-BACTERDET PLUS</b>	x	x			
<b>DD 4112</b>	x	x		x	

Commercial name	Surfaces	Equipment	Air	Air conditioning equipment and conducts	Fabrics
LIMOSEPTIC SF	x	x		x	
TOTAL SHOCK SF	x	x		x	
TERMINAL FORTE SR	x	x		x	
BIOQUELL HPV-AQ	x	x	x		
Vaprox® Hydrogen Peroxide Sterilant		x	x		
Vaprox® 59 Hydrogen Peroxide Sterilant		x	x		
DUROX LRD	x	x	x		
DYBAC NT2G	x	x	x	x	
WA 520 BF	x	x			
DESCOL	x	x			
BIOFILMSTOP CLEANER	x	x	x		
DEXACIDE SB7	x	x			
SANOSIL S010 HC	x	x			
VAPROX	x	x	x		
SANYTOL MULTI-PURPOSE CLEANER	x				
SANYTOL KITCHEN DISINFECTANT	x				

Commercial name	Surfaces	Equipment	Air	Air conditioning equipment and conducts	Fabrics
NDP AIR TOTAL + GREEN	x	x	x		
VIRIBIOL PLUS	x	x	x		

**National Registry of products for the disinfection of surfaces and air (environmental use)**

Commercial name	Registration Number	Active Substance	User	Manufacturer's recommended concentration	Manufacturer's recommended application procedure
RELY+ON VIRKON	13-20/40/90-01562	Pentapotassium bis(peroxymonosulphate) bis(sulphate)- triple salt: 49.7% (10.49% oxygen available)	- Specialized professional staff	10 gr product/ 1 l of water for 50-75 m <sup>3</sup>	• Air disinfection: Fogging with the product diluted in water. Recommended safety period: 12 hours.
OX-VIRIN	15-20/40/90-02518	Hydrogen peroxide: 25%, Peracetic acid: 5%, Acetic acid 8%	- Specialized professional staff	1 %	• Air disinfection: Fogging with the product diluted in water with a contact time of 60 min. Recommended safety period: 24 hours.
SANITAS PROCSAN	17-20/40/90-05489	Didecyldimethyl ammonium chloride: 6.9%	- Professional Staff	2 % at the rate of 300 ml/m <sup>2</sup>	• Contact disinfection: Surfaces and equipment by spraying, immersion or brushing of the product diluted in water with a contact time of 15 s. Recommended safety period: 24 hours.

Commercial name	Registration Number	Active Substance	User	Manufacturer's recommended concentration	Manufacturer's recommended application procedure
					<ul style="list-style-type: none"> <li>• Air disinfection: Spraying or fogging with the product diluted in water with a contact time of 15 s. Recommended safety period: 24 hours.</li> </ul>
SANYTOL HOME AND FABRIC DISINFECTANT	17-20/40/90-06255	Biphenyl-2-ol: 0.4%, Ethanol: 30.6%	<ul style="list-style-type: none"> <li>- General public</li> <li>- Professional staff</li> <li>- Specialized professional staff</li> </ul>	Undiluted	<ul style="list-style-type: none"> <li>• Contact disinfection: surfaces and fabrics, by conventional spraying of the product from a distance of about 25 cm.</li> <li>• Aerial disinfection for use by specialized personnel: aerial spraying of the product.</li> </ul>
OX-VIRIN READY TO USE	15-20/40/90-07783	Hydrogen peroxide: 0.2%, Peracetic acid: 0.05%	<ul style="list-style-type: none"> <li>- General public</li> <li>- Professional staff</li> </ul>	Undiluted	<ul style="list-style-type: none"> <li>• Contact disinfection: Surfaces and equipment by spraying with the pure product.</li> </ul>
			<ul style="list-style-type: none"> <li>- Specialized professional staff</li> </ul>	Undiluted	<ul style="list-style-type: none"> <li>• Air disinfection: Spraying or fogging with the pure product.</li> </ul>
SANOSIL S010	18-20/40/90-09514	Hydrogen peroxide: 5%, Silver: 0.00415%	<ul style="list-style-type: none"> <li>- Professional staff</li> </ul>		<ul style="list-style-type: none"> <li>• Contact disinfection for use: Surfaces and equipment by spraying, scrubbing, brushing, wiping or immersion with the pure product. Contact time 30 min. Safety period of 24 hours.</li> </ul>

Commercial name	Registration Number	Active Substance	User	Manufacturer's recommended concentration	Manufacturer's recommended application procedure
			-Specialized professional staff	Undiluted at the rate of 80ml/m <sup>2</sup>	<ul style="list-style-type: none"> <li>• Disinfection of air conditioning equipment and conduits: Wet spraying with pure product apparatus. Contact time 30 min. 24 hours safety period.</li> <li>• Air disinfection: Wet spraying by means of an appliance or fogging with the pure product. Contact time 30 min. Safety period of 24 hours</li> </ul>
AMBIDOX 25	19-20/40/90-10190	Didecyldimethyl ammonium chloride: 6.93%	- Professional staff	Consult with the manufacturer (depending on the characteristics and requirements of each installation)	• Contact disinfection: surfaces and equipment by spraying, immersion, wiping or mopping with the product diluted in water respecting contact times.
			- Specialized professional staff	Consult the manufacturer (depending on the size of the area to be treated)	<ul style="list-style-type: none"> <li>• Air disinfection: fogging of the product diluted in water respecting the contact times. Safety period of 3 hours.</li> <li>• Disinfection in air conditioning equipment and ducts: spraying or fogging of the pure product respecting contact times. Safety period of 12 hours.</li> </ul>



Commercial name	Registration Number	Active Substance	User	Manufacturer's recommended concentration	Manufacturer's recommended application procedure
OXA-BACTERDET PLUS	19-20/40/90-10220	Decildimethylammonium chloride: 4.5%	- Professional staff	5 %	<ul style="list-style-type: none"> <li>• Contact disinfection: surfaces and equipment by spraying or manual washing with the product diluted in water respecting contact times.</li> </ul>
DD 4112	20-20/40/90-10255	Didecyldimethyl ammonium chloride: 6.93%	- Professional staff	Consult with the manufacturer (depending on the characteristics and requirements of each installation: roughly 5 - 10 ml/m <sup>3</sup> )	<ul style="list-style-type: none"> <li>• Contact disinfection: surfaces and equipment by spraying, immersion, wiping or mopping with the product diluted in water respecting the contact times.</li> <li>• Disinfection of air conditioning equipment and ducts. In air conditioning equipment, the instructions for use will be only punctual with subsequent recycling of clean air for at least 1 hour in the absence of persons, after which the safety period of 3 hours will be respected. It must not be used continuously by mechanical application with a dispenser.</li> </ul>
LIMOSEPTIC SF	12-20/40/90-01927	Didecyldimethyl ammonium chloride: 4.5%, Glutaraldehyde: 5%	- Specialized professional staff	1% :4 pulses / envelopes (25 ml.) for every 10 L. of water	<ul style="list-style-type: none"> <li>• Contact disinfection: surfaces and equipment by spraying and/or washing with the product previously diluted in water.</li> <li>• Disinfection of air conditioning equipment and ducts. In air conditioning equipment, use will be only punctual with subsequent recycling of clean air for at least 1 hour in the</li> </ul>

Commercial name	Registration Number	Active Substance	User	Manufacturer's recommended concentration	Manufacturer's recommended application procedure
					absence of people, after which the 24-hour safety period will be respected. It must not be used continuously by mechanical application with a distributor.
TOTAL SHOCK SF	12-20/40/90-02102	Glutaraldehyde: 2.5%	Specialized professional staff.	Undiluted at the rate of 12 min/100 m <sup>3</sup>	<ul style="list-style-type: none"> <li>• Contact disinfection: surfaces and equipment by fogging with the pure product Apply in absence of people. Safety period of 24 hours</li> <li>• Disinfection of air conditioning equipment and ducts. In air conditioning equipment the mode of use will be only in a timely manner with subsequent recycling of clean air for at least 1 hour without people, then comply with the safety period of 24 hours. It should not be used continuously by mechanical application with a dispenser.</li> </ul>
TERMINAL FORTE SR	17-20/40/90-05739	Hydrogen peroxide: 9%, Peracetic acid: 0.25%, Isopropyl alcohol:9.99%	- Specialized professional staff.	Undiluted at the rate of 36 min/100 m <sup>3</sup>	<ul style="list-style-type: none"> <li>• Contact disinfection: surfaces and equipment by fogging with the pure product Apply in absence of people. Safety period of 24 hours</li> <li>• Disinfection of air conditioning equipment and ducts. Micronebulization with the pure product, the mode of use will be only of</li> </ul>

Commercial name	Registration Number	Active Substance	User	Manufacturer's recommended concentration	Manufacturer's recommended application procedure
					punctual form with later recycling of the clean air at least during 1 hour in absence of people, fulfilling later the term of security of 4 hours.
BIOQUELL HPV-AQ	17-20/40/90-08737	Hydrogen peroxide: 35.85%	- Specialized professional staff.	Undiluted	<ul style="list-style-type: none"> <li>• Air disinfection, apply the pure product with automated vaporization system.</li> </ul>

#### European registration of products for surface and airborne disinfection (environmental use)

Commercial name	Registration number	Active substance	User	Manufacturer's recommended concentration	Manufacturer's recommended application procedure
Vaprox® Hydrogen Peroxide Sterilant	ES/MRF(NA)-2019-02-00622-1-1	Hydrogen peroxide: 35%	- Specialized professional staff	Undiluted	<ul style="list-style-type: none"> <li>• Disinfection of non-porous surfaces, materials, equipment and furniture not used for direct contact with food or animal feed, within a sealed enclosure or in enclosures Industrial, Commercial and Institutional environments.</li> <li>• Disinfection by a vaporized hydrogen peroxide (VHP) unit</li> </ul>

Vaprox® 59 Hydrogen Peroxide Sterilant	ES/MRF(NA)- 2019-02-00622-2- 1	Hydrogen peroxide: 59%	- Specialized professional staff	Undiluted	<ul style="list-style-type: none"> <li>• Disinfection of non-porous surfaces, materials, equipment and furniture not used for direct contact with food or animal feed, within a sealed enclosure or in enclosures Industrial, Commercial and Institutional environments.</li> <li>• Disinfection by a vaporized hydrogen peroxide (VHP) unit</li> </ul>
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**National Registry of products for the disinfection of materials and equipment in contact with food/feed (food industry)**

Commercial name	Registration Number	Active Substance	User	Manufacturer's recommended concentration	Manufacturer's recommended application procedure
RELY+ON VIRKON	13-20/40/90-1562-HA	Pentapotassium bis (peroxymonosulphate) bis(sulphate)- triple salt: 49.7% (10.49% oxygen available)	- Professional staff		<ul style="list-style-type: none"> <li>• Contact disinfection: surfaces and equipment by spraying, immersion or washing with a cloth or mop with the product diluted in water. Recommended safety period: 12 hours.</li> </ul>
			-Specialized professional staff	10 gr product/ 1 l of water for 50-75 m <sup>3</sup>	<ul style="list-style-type: none"> <li>• Air disinfection. Fogging with the product diluted in water, it is recommended a safety period of 12 hours without people, properly ventilated before entering the enclosure.</li> </ul>

Commercial name	Registration Number	Active Substance	User	Manufacturer's recommended concentration	Manufacturer's recommended application procedure
LIMOSEPTIC SF	12-20/40/90-01927-HA	Didecyldimethyl ammonium chloride: 4.5%, Glutaraldehyde: 5%,	-Specialized professional staff.	1%:4 pulses / envelopes (25 ml.) for every 10 L. of water	<ul style="list-style-type: none"> <li>• Contact disinfection: surfaces and equipment by spraying and/or washing with the product previously diluted in water.</li> <li>• Disinfection of air conditioning equipment and ducts. In air conditioning equipment, use will be only punctual with subsequent recycling of clean air for at least 1 hour in the absence of people, after which the 24-hour safety period will be respected. It must not be used continuously by mechanical application with a distributor.</li> </ul>
TOTAL SHOCK SF	12-20/40/90-02102-HA	Glutaraldehyde: 2.5%	- Specialized professional staff	Undiluted at the rate of 12 min/100 m <sup>3</sup>	<ul style="list-style-type: none"> <li>• Contact disinfection: surfaces and equipment by fogging with the pure product Apply in absence of people. Safety period of 24 hours</li> <li>• Disinfection of air conditioning equipment and ducts. In air conditioning equipment the mode of use will be only in a timely manner with subsequent recycling of clean air for at least 1 hour without people, then comply with the safety period of 24 hours. It should not be used continuously by mechanical application with a dispenser.</li> </ul>

Commercial name	Registration Number	Active Substance	User	Manufacturer's recommended concentration	Manufacturer's recommended application procedure
OX-VIRIN	15-20/40/90-02518-HA	Hydrogen peroxide: 25%  Peracetic acid: 5%  Acetic acid 8%	- Professional staff	1 %	<ul style="list-style-type: none"> <li>• Contact disinfection: surfaces and equipment by spraying, immersing or brushing with the product diluted in water with a contact time of 60 min. Recommended safety period: 24 hours.</li> </ul>
			- Specialized professional staff	1 %	<ul style="list-style-type: none"> <li>• Air disinfection: Fogging with the product diluted in water with a contact time of 60 min. Recommended safety period: 24 hours.</li> </ul>
SANITAS PROCSAN	17-20/40/90-05489-HA	Didecyldimethyl ammonium chloride: 6.9%	- Professional staff	2 % at the rate of 300 ml/m <sup>2</sup>	<ul style="list-style-type: none"> <li>• Contact disinfection: surfaces and equipment by spraying, immersing or brushing with the product diluted in water with a contact time of 15s. Recommended safety period: 24 hours.</li> </ul>
TERMINAL FORTE SR	17-20/40/90-05739-HA	Hydrogen peroxide: 9%, Peracetic acid: 0.25%,  Isopropyl alcohol: 9.99%	- Specialized professional staff	Undiluted at the rate of 36 min/100 m <sup>3</sup> .	<ul style="list-style-type: none"> <li>• Contact disinfection: surfaces and equipment by fogging with the pure product. Apply in absence of people. Safety period of 24 hours.</li> <li>• Disinfection of air and of air conditioning's equipment and ducts: Micronebulization with the pure product. This product is obtained by adding the SOLUCION FORTE SR to the SOLUCION TERMINAL SR.</li> </ul>

Commercial name	Registration Number	Active Substance	User	Manufacturer's recommended concentration	Manufacturer's recommended application procedure
DUROX LRD	17-20/40-05890-HA	Hydrogen peroxide: 35%	- Specialized professional staff	Undiluted or diluted (consult the manufacturer: depending on the characteristics and requirements of each installation)	<ul style="list-style-type: none"> <li>• Air disinfection: Nebulization or thermonebulization with the pure product or diluted in water.</li> </ul>
DYBAC NT2G	15-20/40-07290-HA	Glioxal: 6%, Glutaraldehyde: 12%	- Specialized professional staff	2 % at the rate of 0,3 – 0,5 l/100 m <sup>3</sup>	<ul style="list-style-type: none"> <li>• Contact disinfection: surfaces and equipment by spraying, soaking, circulating, immersing and/or manually brushing with product diluted in water. Safety period: 24 hours.</li> <li>• Air disinfection: nebulization or thermonebulization with the product diluted in water. Safety period: 24 hours.</li> <li>• Disinfection of air conditioning ducts by spraying or fogging</li> </ul>
WA 520 BF	15-20/40/90-07590-HA	Didecyldimethylammonium chloride: 1%	- Professional staff	Undiluted	<ul style="list-style-type: none"> <li>• Contact disinfection: Surfaces and equipment by spraying, with the pure product.</li> </ul>

Commercial name	Registration Number	Active Substance	User	Manufacturer's recommended concentration	Manufacturer's recommended application procedure
OX-VIRIN PRESTO AL USO	15-20/40/90-07783-HA	Hydrogen peroxide: 0.2%, Peracetic Acid: 0.05%	- Professional staff	Undiluted	• Contact disinfection: Surfaces and equipment by spraying, with the pure product.
			- Specialized professional staff	Undiluted	• Air disinfection: Spraying or fogging with the pure product.
DESCOL	16-20/40/90-08635-HA	Ethanol: 71%, Phenoxyethanol: 2.1%, N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine: 0.1%	- Professional staff	Undiluted or diluted to 80 %	• Contact disinfection: Surfaces and equipment by spraying and immersing with the pure product or diluted in water. Contact time 15 min.
BIOQUELL HPV-AQ	17-20/40/90-08737-HA	Hydrogen peroxide: 35,85%	- Specialized professional staff	Undiluted	• Air disinfection: apply the pure product with an automated vaporization system
BIOFILMSTOP CLEANER	18-20/40/90-09472-HA	Didecyldimethyl ammonium chloride: 5%, Benzyl chloride C12-C16 alkyldimethyl ammonium: 5%	- Professional staff	5 %	• Contact disinfection: surfaces and equipment by spraying or washing with a brush, sponge or mop and the product diluted in water with a contact time of 20 min. Security period: minimum 4 hours.



Commercial name	Registration Number	Active Substance	User	Manufacturer's recommended concentration	Manufacturer's recommended application procedure
DEXACIDE SB7	18/20/40/90-09482-HA	Didecyldimethyl ammonium chloride: 7%	- Professional staff	4 % at the rate of 300 ml/m <sup>2</sup>	<ul style="list-style-type: none"> <li>Contact disinfection: Surfaces and equipment by spraying, washing with cloth or mop with the product diluted in water. Contact time 30 min. Security period 24 hours.</li> </ul>
SANOSIL S010	18/20/40/90-09514-HA	Hydrogen peroxide: 5%, Silver: 0.00415%	- Professional staff	Undiluted at the rate of 80 ml/m <sup>2</sup>	<ul style="list-style-type: none"> <li>Contact disinfection for use: Surfaces and equipment by spraying, scrubbing, brushing, wiping or immersing with the pure product. Contact time 30 min. Safety period of 24 hours.</li> </ul>
AMBIDOX 25	19-20/40/90-1019-HA	Didecyldimethyl ammonium chloride: 6.93%	- Professional staff	Consult with the manufacturer (depending on the characteristics and requirements of each installation)	<ul style="list-style-type: none"> <li>Contact disinfection: surfaces and equipment by spraying, immersing, wiping or mopping with the product diluted in water respecting contact times. Safety period of 3 hours.</li> </ul>
			- Specialized professional staff	Consult with the manufacturer (depending on the characteristics and requirements of each installation)	<ul style="list-style-type: none"> <li>Air disinfection: fogging of the product diluted in water respecting the contact times. Safety period of 12 hours.</li> <li>Disinfection in air conditioning equipment and ducts: spraying or fogging of the pure</li> </ul>

Commercial name	Registration Number	Active Substance	User	Manufacturer's recommended concentration	Manufacturer's recommended application procedure
					product respecting contact times. Safety period of 12 hours.
OXA-BACTERDET PLUS	19-20/40/90-10220-HA	Decildimethylammonium chloride: 4.5%	- Professional staff	5 %	<ul style="list-style-type: none"> <li>• Contact disinfection: surfaces and equipment by spraying or manual washing with the product diluted in water respecting the contact times.</li> </ul>
DD 4112	20-20/40/90-10255-HA	Didecyldimethyl ammonium chloride: 6.93%	- Professional staff	Consult with the manufacturer (depending on the characteristics and requirements of each installation: roughly 5 - 10 ml/m <sup>3</sup> )	<ul style="list-style-type: none"> <li>• Contact disinfection: surfaces and equipment by spraying, immersing, wiping or mopping with the product diluted in water respecting the contact times.</li> </ul>

#### National Register of products for surface disinfection (clinical use)

Commercial name	Registration Number	Active Substance	User	Manufacturer's recommended concentration	Manufacturer's recommended application procedure
SANOSIL S010 HC	987-DES	Hydrogen peroxide: 5,0% Silver: 0,005%	-Professional staff	Undiluted at the rate of 80 ml/m <sup>2</sup>	<ul style="list-style-type: none"> <li>• Contact disinfection: surfaces and equipment by spraying, immersing, wiping or</li> </ul>

Commercial name	Registration Number	Active Substance	User	Manufacturer's recommended concentration	Manufacturer's recommended application procedure
					mopping with the pure product. Contact time 30 min. Safety period of 24 hours.
LIMOSEPTIC SF	614-DES	Didecyldimethyl ammonium chloride: 4.5%, Glutaraldehyde: 5%,	- Specialized professional staff.	1%:4 pulses / envelopes (25 ml.) for every 10 L. of water	<ul style="list-style-type: none"> <li>• Contact disinfection: surfaces and equipment by spraying and/or washing with the product previously diluted in water.</li> <li>• Disinfection of air conditioning equipment and ducts. In air conditioning equipment, use will be only punctual with subsequent recycling of clean air for at least 1 hour in the absence of people, after which the 24-hour safety period will be respected. It must not be used continuously by mechanical application with a distributor.</li> </ul>
TERMINAL Forte SR	619-DES	Hydrogen peroxide: 8,5% Peracetic acid: 4,99%	- Specialized professional staff	Undiluted at the rate of 36 min/100 m <sup>3</sup> .	<ul style="list-style-type: none"> <li>• Contact disinfection: surfaces and equipment by fogging with the pure product. Apply in absence of people. Safety period of 24 hours.</li> </ul>
Total Shock SF	613-DES	Glutaraldehyde: 2,5%	- Professional staff - Specialized professional staff	Undiluted at the rate of 12 min/100 m <sup>3</sup>	<ul style="list-style-type: none"> <li>• Contact disinfection: surfaces and equipment by fogging with the pure product Apply in absence of people. Safety period of 24 hours</li> </ul>

Commercial name	Registration Number	Active Substance	User	Manufacturer's recommended concentration	Manufacturer's recommended application procedure
					<ul style="list-style-type: none"> <li>• Disinfection of air conditioning equipment and ducts. In air conditioning equipment the mode of use will be only in a timely manner with subsequent recycling of clean air for at least 1 hour without people, then comply with the safety period of 24 hours. It should not be used continuously by mechanical application with a dispenser.</li> </ul>
VAPROX	550-DES	Hydrogen peroxide: 35%	-Professional staff	Undiluted	<ul style="list-style-type: none"> <li>• Air disinfection: apply the pure product with an automated vaporization system.</li> </ul>

On the other hand, considering the need for these biocide products, and in anticipation of a possible shortage, the Ministry of Health has also considered making the following list which contains viricide products authorized and registered for environmental use (TP2) and food industry (TP4) in Spain that have proven effective against enveloped virus, taking into account that the coronavirus SARS-CoV-2 is also an enveloped virus and considering the active substances, concentrations of the same that are included in the biocide products listed in this document as well as the information available to date.

**Registro Nacional de productos para la desinfección de superficies y aérea (uso ambiental)**

Commercial name	Registration Number	Active Substance	User	Manufacturer's recommended concentration	Manufacturer's recommended application procedure
SANYTOL MULTI-PURPOSE CLEANER	12-20/40-05237	Didecyldimethyl ammonium chloride: 0.5%	- General public	Undiluted	<ul style="list-style-type: none"> <li>• Contact disinfection: Surfaces by spraying with the pure product.</li> </ul>
SANYTOL DESINFECTANTE COCINAS	14-20/40-05317	Didecyldimethyl ammonium chloride: 2%	- General public	Undiluted	<ul style="list-style-type: none"> <li>• Contact disinfection: Surfaces by spraying with the pure product.</li> </ul>
NDP AIR TOTAL + GREEN	17-20/40-05645	Didecyldimethyl ammonium chloride: 0.46%, 2-phenoxyethanol: 0.1%	- Specialized professional staff	Undiluted at the rate of 300 ml/150 m <sup>3</sup>	<ul style="list-style-type: none"> <li>• Air disinfection: Spraying of the pure product. Safety period of 24 hours.</li> </ul>
VIRIBIOL PLUS	15-20/40-07342	Lactic Acid: 2%, 4-chloro-3-methylphenol: 4.5%, Biphenyl-2-ol: 7%, Glutaraldehyde: 4.25%	- Specialized professional staff	1.5 L of product in 100L of water	<ul style="list-style-type: none"> <li>• Contact disinfection: Spraying with product previously diluted in water.</li> <li>• Air disinfection: Fogging of the product previously diluted in water.</li> </ul>

**National Register of products for the disinfection of surfaces in contact with food and feed (food industry)**

<b>Commercial name</b>	<b>Registration Number</b>	<b>Active Substance</b>	<b>User</b>	<b>Manufacturer's recommended concentration</b>	<b>Manufacturer's recommended application procedure</b>
SANYTOL MULTI-PURPOSE CLEANER	12-20/40-05237	Didecyldimethyl ammonium chloride: 0.5%	- Professional staff	Undiluted	<ul style="list-style-type: none"><li>• Contact disinfection: Surfaces by spraying with the pure product.</li></ul>