



LIFECLEAN

HEALTHCARE



# HEALTHCARE

LifeClean's CE-marked products

# LifeClean Disinfectant

LifeClean is an aqueous chlorine dioxide (ClO<sub>2</sub>) solution. A high-level disinfectant for non-invasive medical devices. With a proven broad spectrum of kill, including sporicidal, bactericidal (Gram-negative and Gram-positive bacteria), mycobactericidal, virucidal, fungicidal, and yeasticidal capacity.



LifeClean Disinfectant StD



LifeClean Disinfectant Plus



# Disinfectant Std

## Inteded Use:

High-level broad spectrum disinfectant for non-invasive medical devices, intended for clean conditions ("visibly clean")

Organism	Contact time Clean	Standard
✓ Sporidical	5 min	EN 17126
✓ Mycobactericidal	2 min	EN 14563
✓ Virucidal	1 min	EN 14476
✓ SARS-CoV-2	30 sec	EN 14476
✓ Fungicidal / Yeast	1 min	EN 13624
✓ Bactericidal	1 min	EN 13727



# Disinfectant Plus

## Inteded Use:

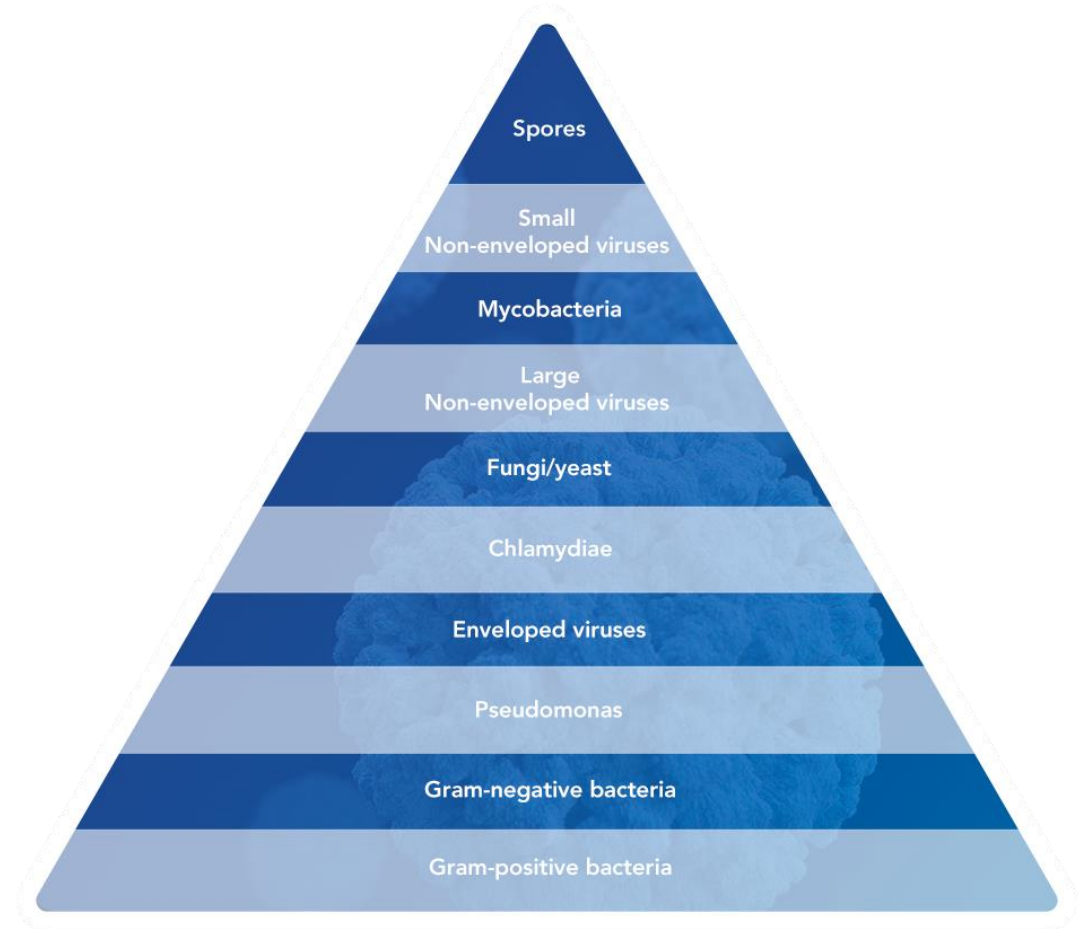
High-level broad spectrum disinfectant for non-invasive medical devices, intended for dirty conditions ("visibly dirty")

Organism	Contact time Clean	Contact time Dirty	Standard
✓ Sporidical	2 min	2 min	EN 17126
✓ Mycobactericidal	1 min	-	EN 14563
✓ Virucidal	1-2 min	-	EN 14476/16777
✓ SARS-CoV2	30 sec	-	EN 14476
✓ Fungicidal / Yeast	1 min	2 min	EN 13624/14562/16615
✓ Bactericidal	1 min	2 min	EN 13727/14561/16615

## HIGH-LEVEL DISINFECTION

LifeClean is proven to be a high-level disinfectant, i.e., effective against the entire spectrum of microorganisms. Thus, LifeClean successfully inactivates the many pathogens that plague healthcare and cause HCAs.

**Evaluated as High-level solution by SSI.**



## Spores

- EN17126:2018  
 Bacillus subtilis  
 Bacillus cereus  
 Clostridium difficile
- EN13697:2001  
 Bacillus subtilis  
 Clostridium difficile
- EN13704:2002  
 Clostridium difficile

## Viruses

- EN14475:2015  
 IPN-virus
- EN14476:2019  
 Poliovirus  
 Adenovirus  
 Murint norovirus (MNV)  
 SARS-CoV-2
- EN14349:2007  
 Aviärt influensavirus (H10N7)  
 PPV, stam 893/76

## Mycobacteria

- EN14563:2009  
 Mycobacterium terrae  
 Mycobacterium avium
- EN14348:2005  
 Mycobacterium terrae  
 Mycobacterium avium

## Fungi (mold, yeast)

- EN13624:2013  
 Candida albicans  
 Aspergillus brasiliensis  
 Candida auris
- EN14562:2006  
 Candida albicans  
 Aspergillus brasiliensis
- EN16615:2015  
 Candida albicans
- AOAC 961.02  
 Trichophyton mentagrophytes

## Bacteria

- EN16615:2015  
 Enterococcus hirae  
 Pseudomonas aeruginosa  
 Staphylococcus aureus
- EN13727:2015  
 Staphylococcus aureus  
 Enterococcus hirae  
 Pseudomonas aeruginosa  
 Escherichia coli  
 Campylobacter jejuni  
 Salmonella typhi  
 Listeria monocytogenes  
 Legionella pneumophila  
 Streptococcus equi  
*Klebsiella pneumoniae*  
*Carnobacterium piscicola*  
*Enterococcus faecium*  
*Acinetobacter baumannii*  
 Salmonella choleraesuis
- EN14349:2012  
 Aeromonas salmonicida  
 Yersinia ruckeri



Contact time  
 within 2/5 minutes

## SWIFT DISINFECTION

LifeClean is a premixed disinfectant without activation time. LifeClean reacts immediately and with a short contact time – eliminating the entire microbial spectrum, including spores, within two (LifeClean Disinfectant Plus) to five minutes (LifeClean Disinfectant Std). Additionally, LifeClean’s contact time is shorter than its drying time, thus no reapplication is needed (when applied according to IFU), which ensures swift disinfection for safer healthcare environments.

Organism	Contact time	Standard
✓ Spores	2-5 min	EN 17126
✓ Mycobacteria	1 min	EN 14563
✓ Bacteria	1 min	EN 13727
✓ Virus	1 min	EN 14476
✓ SARS-CoV-2	30 sek	EN 14476
✓ Fungi/yeast	1 min	EN 13624



# Clean & Green?

## Sustainable disinfection?

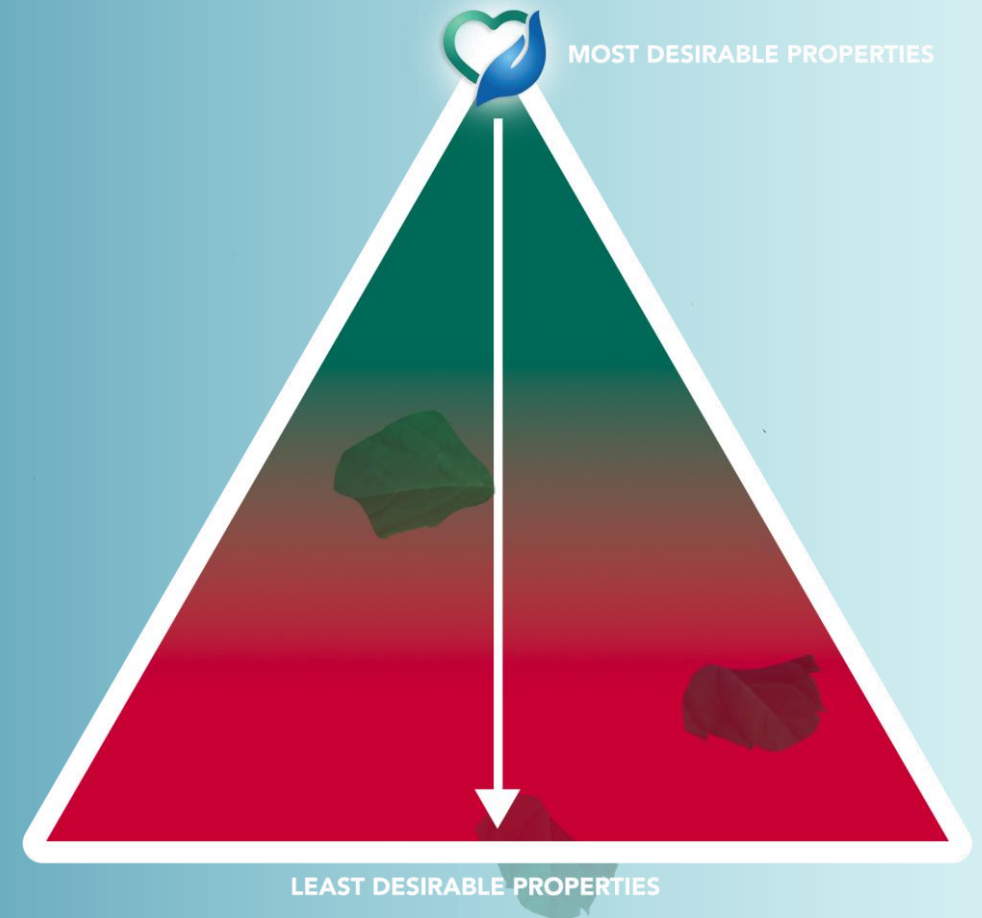
The purpose of disinfection products is to kill unwanted organisms. Thus, the biocides legislation prohibits product claims such as "environmentally friendly" or "harmless". Objectively speaking, however, it is a fact that disinfectants differ in their sustainability properties.

The US CDC describes the ideal disinfectant as product that is not harmful to users and environmentally friendly in the sense that it should not harm the environment upon disposal. Other frequently requested properties are the absence of dangerous by-products and that the components are easily (bio)degradable. In addition, we believe that it is everyone's responsibility to minimize carbon dioxide emissions.



# Sustainable disinfection?

- LifeClean is not classified as dangerous according to EG 1272/2008 (CLP).
- LifeClean has passed toxicology tests\* by third-party laboratories as non-irritant to skin and eyes as well as not carcinogenic, does not induce chromosomal damage, and remains below the acceptable limits for oral toxicity emissions (when applied according to IFU).
- LifeClean reacts immediately, breaks down quickly, and leaves no hazardous residuals or toxic compounds. Classified as non-hazardous waste.
- LifeClean's components are easily biodegradable and does not accumulate in nature. Remains may be flushed down the drain (sink).
- LifeClean does not form chlorinated or THM by-products such as chloramines which may occur when using hypochlorite or hypochlorous acid.



# Sustainable disinfection?



800 PPM LifeClean equivalent to common alcohol-based products intended for hand and surface disinfection.

45 participants reported no skin irritation or discomfort when LifeClean (750 PPM) was used as hand disinfectant.



LifeClean is unlikely to give chlorine dioxide levels in the breathing zone exceeding the regulated occupational exposure levels, when used in well ventilated rooms.



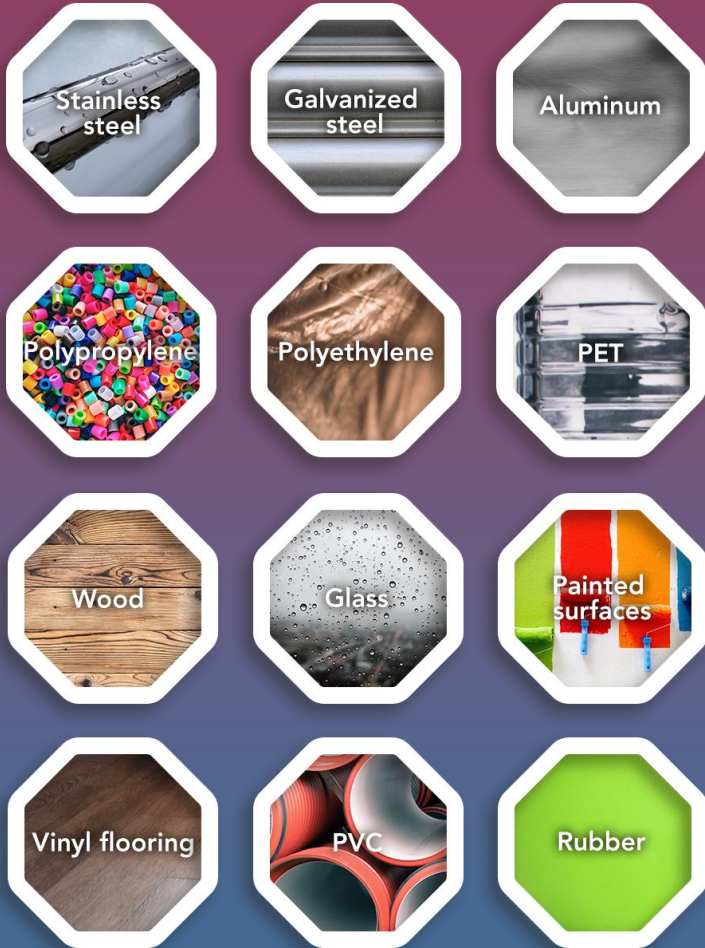
LifeClean Disinfectant Std (400 PPM) is classified into UN GHS No Category and are therefore non-irritant.

# Sustainable disinfection?



Although LifeClean has passed toxicology tests and is classified as non-hazardous, exposure should be limited. The respiratory organs are particularly important. In case of insufficient ventilation and prolonged exposure, the use of suitable respiratory protection is recommended (Ref: safety data sheet section 8.2.1.)



- The room should be adequately ventilated to reduce exposure.
- Chemicals can react with each other.
- PPE: is worn to both protect the user from hazardous chemicals and also from potential cross-contamination.



## BROAD MATERIAL COMPATIBILITY

-  LifeClean got broad material compatibility and can be used with the most common materials (when applied according to IFU).
-  LifeClean works in clean and dirty conditions.



**Discoloration of soft metals has occurred; if unsure, wipe or rinse the surface after decontamination.**

1 For professional use only. Follow local guidelines. Use gloves.

2 PPE should be used if needed\*.

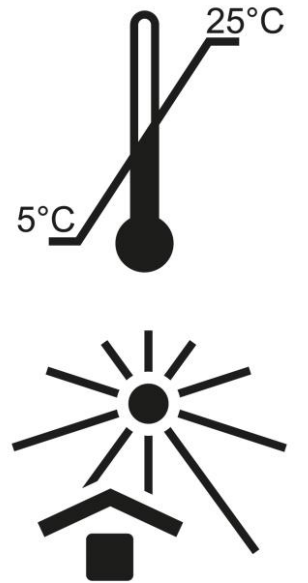
3 Remove any visible dirt.

4 Apply a generous amount of solution on wipe.

5 Use wipe mechanically on surface to disinfect

6 Allow LifeClean to work for the desired contact/application time

7 Mark opening date on the label. Close opened bottle





LifeClean Disinfectant  
Std



LifeClean Disinfectant  
Plus

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