clinell®

Five disadvantages of chlorine surface disinfection

Chlorine has been used as a disinfectant within the healthcare industry for many years, but as infection prevention & control (IPC) methods have improved, new infection prevention & control solutions are available to provide more effective disinfection.

1 Toxic fumes

Chlorine produces toxic fumes that are hazardous to the user and surrounding staff and patients. These fumes can cause varying degrees of irritation to the skin, eyes and airways. However, heavy exposure to chlorine fumes can cause significant damage to your lungs, including coughs, shortness of breath and in extreme cases, obstructive lung disease[1].

2 Inactivated by dirt

Chlorine is a disinfectant without any cleaning properties, so when it encounters organic matter (such as dirt or visible soiling) on surfaces or in its solution, chlorine becomes increasingly inactive. To counteract this, surfaces must be pre-cleaned before using chlorine[2], which builds in an extra step and takes additional time.

3 Dilution errors

To be used effectively, most chlorine products must be diluted with water before use. However, this can leave room for human error, which can cause the solution to be less effective. In addition, chlorine breaks down quickly, which requires multiple solutions to be prepared.

4 Damages surfaces

When chlorine solutions are too strong, they risk damaging surfaces and equipment. Furthermore, strong chlorine concentrations can cause cracking of certain materials. These cracks can provide a reservoir for microorganisms.

5 Absorption reduces efficacy

Chlorine can interact with different cloths used to disinfect surfaces. The active molecules can be trapped within the cloth fibres and can't be released onto the surface, reducing the solution's effectiveness at killing microorganisms.

References

1. Hoyle GW, Svendsen ER. Persistent effects of chlorine inhalation on respiratory health. Ann N Y Acad Sci. 2016;1378(1):33-40.
2. Humphreys PN, Finan P, Rout S, Hewitt J, Thistlethwaite P, Barnes S, et al. A systematic evaluation of a peracetic-acid-based high performance disinfectant. Journal of Infection Prevention. 2013;14(4):126-31.

Clinell Universal Wipes

Compared to chlorine, Clinell Universal Wipes are simple, reliable and effective. Designed for real-world applications, Clinell Universal Wipes overcome the challenges of using traditional disinfectants:

No pre-cleaning
2-in-1 cleaning and disinfecting wipe

Reliable efficacy
Reliable efficacy kills 99.99% of bacteria and enveloped viruses

Easy to use
No dilutions required

Clinically proven
Test wipe evaluated and backed by rigorous clinical studies to ensure wipes kill microorganisms effectively

Surface compatibility
Good surface compatibility with metals, plastics and rubbers

Contact your local GAMA Healthcare representative for more information about Clinell Universal Wipes or visit www.gamahealthcare.com

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