

THE MOST CLINICALLY PROVEN DISINFECTANT WIPE IN THE WORLD

Patented formula

Clinell Sporicidal Wipes come in a stable form that delivers peracetic acid on demand. Peracetic acid is a safe alternative to chlorine and is proven to provide similar or better performance against spores¹.

Simple and easy to use

Just wet with water to activate the dry wipes. No more dilution errors. They do not generate toxic fumes and can be safely used next to patients.

The most powerful wipe in the world

Clinell Sporicidal Wipes kill most known pathogenic microorganisms with a non-selective action. They have a proven 6 log spore kill, in two minutes, under dirty conditions². Proven to outperform other leading sporicidal wipes³, based on kill rates and contact times.

Contains detergent

Clinell Sporicidal Wipes clean and disinfect. Unlike chlorine based products, which are inhibited by dirt and organic matter¹, peracetic acid remains effective in highly soiled conditions

Safe to use on most surfaces

Clinell Sporicidal Wipes are CE certified class Ila medical devices. They can be used on most non-invasive medical devices and equipment without corrosion, unlike chlorine solutions.

Proven to be faster

Proven to be faster and more effective at reducing spore counts than chlorine solutions⁴.

PROBLEMS WITH EXISTING SOLUTIONS

Irregular spray patterns lead to areas of low biocide concentration. Wet wipes always deliver the correct dose.

Wet wipes are significantly better at removing microbial bioburden than spray and dry wipe⁵.

Sprays and wipes

When using sprays and dry wipes, it is common to end up with variable concentrations of biocides⁶. Impregnated wet wipes are significantly better at removing microbial bioburden than when using a spray and dry wipe⁵.

Low concentrations of biocides can cause microorganisms to develop cross-resistance to antibiotics^{7,8}.

Provided there is proper use of efficacious surface disinfectants, avoiding low concentrations of biocides, present scientific data does not suggest that resistance problems will emerge^{9,10}.

Wet wipes have the advantage of delivering a pre-measured dose of biocides, avoiding the risk of resistance.





Sprays provide uneven coverage.



Low biocide concentration may select for resistance.





Two part solution sprays inconsistently mix the biocide, delivering variable concentrations of disinfectant.

Two chamber sprays and wipes

Due to instability of the active biocide, or to prevent degradation over time, dual chamber sprays function by mixing two solutions within the spray head.

It is common to use sprays at an angle, to shoot down onto the surface, meaning more solution will enter the head from one chamber than the other. This creates an uneven mix which can lead to suboptimal concentration of biocides. In a laboratory setting, biocides may not be tested from dual chamber spray bottles – hence test data may not reflect practical, in-use, conditions.

In addition to affecting the efficacy of the biocide, inconsistent mixing increases wastage – reducing number of uses and resulting in increased cost.

The final mixed solution of some two part sprays is gel based or produces a precipitate. This can build up over time, clogging the nozzle and inhibiting the spray. Blocked nozzles lead to even greater inconsistency of coverage than usual, resulting in low concentrations of biocides, which can allow microorganisms to develop cross-resistance⁷.









PROBLEMS WITH EXISTING SOLUTIONS



Do dry wipes affect your disinfectant?





Dry wipes made of either synthetic or natural materials can bind the biocide, changing the concentration of active disinfectant released¹¹.

This means that the liquid coming off the dry wipe may not be the same concentration as the liquid that went into it. For example, the combination of quaternary ammonium compounds (QACs) with an inappropriate type of fabric will effectively abolish its antimicrobial activity¹².







Efficacy testing of disinfectant sprays and solutions has been performed on the liquid.

Efficacy testing of wet wipes is performed on the solution released by the wipe, and the wet wipe itself, so you know the end product exactly conforms to efficacy testing data.



Ineffective against microorganisms



Pre-impregnated wet wipes are proven to **increase** staff compliance¹³

Dry wipes can interfere with the action of common hospital disinfectants¹¹

CHLORINE SOLUTIONS

If a used wipe is plunged back into a bucket of chlorine, organic matter can be introduced. This accelerates breakdown of the active disinfectant.

Double dipping

When a used wipe is dipped back into the bucket, organic matter is introduced, increasing breakdown of the active disinfectant.

The incompatibility of cloths and chlorine-based products has been clearly demonstrated¹⁴. Chlorine solution is tested in the laboratory for its effectiveness, however testing is not done on solution in conjunction with the cloth, but only on the solution by itself.

Clinell Sporicidal Wipes contain detergent, to clean as they disinfect, and remain effective in dirty conditions².



Over diluted solutions are weak and ineffective.



Organic matter makes chlorine ineffective.



Under diluted solutions are toxic and can cause damage to materials.



Organic matter binds to chlorine, reducing efficacy.



WHY CHOOSE CLINELL SPORICIDAL?

Improved cleaning and disinfection of room surfaces decreases the risk of healthcare associated infections¹⁵.

Effective sporicidal agents

Enhanced environmental cleaning with sporicidal agents of rooms housing *Clostridium difficile* infected patients is warranted¹⁶. Key measures to prevent *C. difficile* transmission include correct cleaning and disinfection of hospital room surfaces daily and at discharge. For effective disinfection of *C. difficile*, a sporicidal product plus correct practices are essential¹⁷.

QUATERNARY AMMONIUM COMPOUNDS ARE NOT SPORICIDAL

The number of chemical agents that possess sporicidal activity is limited to alkylating agents and oxidizing agents – such as peracetic acid, hydrogen peroxide and chlorine – with the latter group displaying more rapid sporicidal activity³. Quaternary Ammonium Compounds (QACs) are termed sporistatic³ meaning they only inhibit spore germination and/or outgrowth.

CHLORINE TABLETS ARE INEFFICIENT

Dilution errors can easily occur when preparing chlorine solutions. Using too much water when mixing up a solution can result in a disinfectant that is too weak and ineffective at removing the microbial burden.

Conversely, using too little water results in a solution that is too strong, toxic and harmful to materials, as well as to the user.

TOXICOLOGICAL HAZARDS

All disinfecting procedures must include a risk assessment of potential toxicological hazards.

Chlorine solutions, made from tablets and powders, are hazardous to both the user and the patients: emitting toxic fumes and by-products. Chlorine has been shown to cause obstructive lung disease, shortness of breath, eye irritation, nasal complaints, cough and skin complaints¹⁹.

HEALTH RISKS



Toxic fumes from chlorine based solutions.



Lung damage.

Chronic inhalation of chlorine can increase the

risk of lung fibrosis¹⁹



Eye irritation, nose and throat damage, causing coughs and shortness of breath.

CLINELL SPORICIDAL WIPES

Proven to reduce *Clostridium* 72%²

BACTERIA

Escherichia coli Pseudomonas aeruginosa

Acinetobacter baumannii

Staphylococcus aureus

Klebsiella pneumoniae (ESBL)

Enterococcus faecium (VRE)

Enterococcus hirae

Enterococcus faecalis

Clostridium difficile

Bacillus subtilis

FUNG

MYCOBACTERIA

Candida albicans

Aspergillus nigei

VIRUSES

Adenovirus Poliovirus

Mycobacterium terrae

SPORES

Peracetic acid generating wipes activated by water, for surface disinfection and cleaning of non-invasive medical devices.



TEST EN13727

EN13727

FN1276

FN14561

EN13727

FN14561

EN13727

FN14561

EN13727

EN13727

EN13727

ASTM E2362-09

EN13704

EN16615

Bab et al²

EN14563

EN14348

EN14562

EN13727 EN14562

EN14476

EN14476

SPORICIDAL WIPFS

Clinell Sporicidal Wipes are a high level disinfectant wipe used specifically to target Clostridium difficile spores. They clean and disinfect, providing a direct replacement and safe alternative to chlorine products^{1,4}.

Containing patented technology, Clinell Sporicidal Wipes are designed for use on all surfaces of non-invasive medical devices. They are inactive when dry and, with the addition of water, generate peracetic acid levels that are proven to kill most known microorganisms.

Kills at least of spores in two minutes, in dirty conditions²

ANTIMICROBIAL ACTIVITY

Powerful disinfecting composition using a pH optimised peracetic acid and hydrogen peroxide combination, generated from sodium percarbonate and tetra acetyl ethylene diamine.

High power oxidative kill against all microorganisms including non-enveloped viruses and bacterial endospores.

Greater than 6 log kill (>99.9999%) of spores in two minutes in dirty conditions². Conforms to EN1276, EN13704, EN14348, EN14476, EN14561, EN14562, EN14563 and EN16615.





Dry before activation, each wipe consists of 2 non-woven fabrics bonded together with a unique powder combination in the middle layer.



Water activates the powder to generate high levels of hydrogen peroxide and peracetic acid.



This unique method of application ensures consistent efficacy, with no dilution errors.

USE DISINFECTANTS SAFELY, ALWAYS READ THE LABEL AND PRODUCT INFORMATION BEFORE USE. ALWAYS FOLLOW MEDICAL EQUIPMENT MANUFACTURERS CLEANING PROCEDURES AND GUIDELINES.

	Canine Parvovirus
	A desired to a
ates the powder to	This unique method of ac

PRODUCT INFORMATION UNIT OF ISSUE **ORDER CODE** NHSSC Sporicidal Wipes Pack of 25 CS25 VJT113 Sporicidal Wall Mounted Dispenser for CS25 CS25D

Clinell's industry leading aftercare and training services

Including a revolutionary training kit, specialised nurse trainers, educational materials, customised posters and dispenser installation.

Contact us on: 020 7993 0030 or info@clinell.com.

REFERENCES

- Humphreys PN, Finan P, Rout S, Hewitt J, Thistlethwaite P, Barnes S, et al. A systematic evaluation of a peraceticacid-based high performance disinfectant. Journal of Infection Prevention. 2013;14(4):126-31.
- Hospital Infection Research Laboratory. Sporicidal Efficacy Test. 2007. http://clinell.com/wp-content/uploads/pdf/ Clinell%20Sporicidal%20-%20Efficacy%20Test.pdf.
- Slani H, Cooper C, Maillard JY. Efficacy of "sporicidal" wipes against Clostridium difficile. Am J Infect Control. 2011;39(3):212-8.
- Doan L, Forrest H, Fakis A, Craig J, Claxton L, Khare M. Clinical and cost effectiveness of eight disinfection methods for terminal disinfection of hospital isolation rooms contaminated with Clostridium difficile 027. J Hosp Infect. 2012;82(2):114-21.
- Panousi MN, Williams GJ, Girdlestone S, Hiom SJ, Maillard JY. Evaluation of alcohol wipes used during aseptic manufacturing. Letters in applied microbiology. 2009 May 1;48(5):648-51.
- Sattar SA, Maillard JY. The crucial role of wiping in decontamination of high-touch environmental surfaces: review of current status and directions for the future. American journal of infection control. 2013 May 31:41(5):S97-104.
- Maillard JY, Denyer SP. Emerging bacterial resistance following biocide exposure: should we be concerned?. Chimica oggi. 2009;27(3):26-8.

clinell

Sporicidal

Sporicidal

- Karatzas KA, Randall LP, Webber M, Piddock LJ, Humphrey TJ, Woodward MJ, Coldham NG. Phenotypic and proteomic characterization of multiply antibioticresistant variants of Salmonella enterica serovar Typhimurium selected following exposure to disinfectants. Applied and environmental microbiology. 2008 Mar 1;74(5):1508-16.
- Gebel J, Exner M, French G, Chartier Y, Christiansen B, Gemein S, Goroncy-Bermes P, Hartemann P, Heudorf U, Kramer A, Maillard JY. The role of surface disinfection in infection prevention. GMS hygiene and infection control. 2013;8(1).
- Meyer B, Cookson B. Does microbial resistance or adaptation to biocides create a hazard in infection prevention and control?. Journal of Hospital Infection. 2010 Nov 30;76(3):200-5.
- Bloss R, Meyer S, Kampf G. Adsorption of active ingredients of surface disinfectants depends on the type of fabric used for surface treatment. J Hosp Infect. 2010;75(1):56-61.
- Engelbrecht K, Ambrose D, Sifuentes L, Gerba C, Weart I, Koenig D. Decreased activity of commercially available disinfectants containing quaternary ammonium compounds when exposed to cotton towels. Am J Infect Control. 2013;41(10):908-11.
- Wiemken TL, Curran DR, Pacholski EB, Kelley RR, Abdelfattah RR, Carrico RM, Ramirez JA. The value of ready-to-use disinfectant wipes: compliance, employee time, and costs. American journal of infection control. 2014 Mar 31;42(3):329-30.

- Goldsmith M, Latlief M, Friedl J, Stuart L. Adsorption of available chlorine and quaternary by cotton and wool fabrics from disinfecting solutions. Applied microbiology. 1954;2(6):360.
- Weber DJ, Anderson D, Rutala WA. The role of the surface environment in healthcare-associated infections. Current opinion in infectious diseases. 2013 Aug 1;26(4):338-44.
- Weber DJ, Anderson DJ, Sexton DJ, Rutala WA. Role of the environment in the transmission of Clostridium difficile in health care facilities. American journal of infection control. 2013 May 31;41(5):S105-10.
- Cadhum JL, Hurless KN, Kundrapu S, Donskey CJ. Transfer of Clostridium difficile Spores by Nonsporicidal Wipes and Improperly Used Hypochlorite Wipes Practice+ Product= Perfection. Infection Control & Hospital Epidemiology. 2013 Apr 1;34(04):441-2.
- Maillard JY. Innate resistance to sporicides and potential failure to decontaminate. Journal of Hospital Infection. 2011 Mar 31;77(3):204-9.
- Hoyle GW, Svendsen ER. Persistent effects of chlorine inhalation on respiratory health. Ann N Y Acad Sci. 2016;1378(1):33-40.
- 20. Carter Y, Barry D. Tackling C difficile with environmental cleaning. Nurs Times. 2011;107(36):22-5.



Hoped by p

