

DuPont™ RelyOn™ PeraSafe™ Liquid Sterilant

Comparison

	RelyOn PeraSafe™ Liquid Sterilant	Glutaraldehyde 2%	Ortho-phthalaldehyde (0.55%)	Alcohol (70%)	Chlorine dioxide	Superoxidised water (HOCl/Cl2)
Spores	Rapid	Poor	Poor	None	Good	Good
Mycobacteria	Good	Moderate	Good	Good	Good	Good
Bacteria	Rapid	Good	Good	Good	Good	Good
Viruses (Enveloped)	Good	Good	Good	Good	Good	Good
Viruses (Non Enveloped)	Good	Good	Good	Moderate	Good	Good
Stable	24 hours	Moderate	Moderate	Yes	No	No
Inactivation by organic matter	No	No (fixative)	No (fixative)	Yes (fixative)	Yes	Yes
Corrosive/damaging	No	No	No (staining)	Slight	Yes	Yes
Irritant (I) Sensitising (S)	I	I/S	I/S	No (flammable)	I	No

Efficacy data

Organism	Strain	Protocol	Contact time	Log reduction
Bacillus subtilis spores	NCTC 10073	HIRL; Babb & Ayliffe	5 Minutes	> 6 log
Mycobacterium terrae	NCTC 10856	HIRL; Babb & Fraise et al	10 minutes	> 6 log
Ps. aeruginosa	NCTC 6749	EN 1276	5 minutes	> 6 log
Staphylococcus aureus (Methicillin resistant)	EMRSA Clinical Isolate	EN 1276	5 minutes	> 6 log
Escherichia coli	NCTC 8196	EN 1276	5 minutes	> 6 log
Vancomycin Resistant Enterococcus (VRE)	Clinical isolate	EN 1276	5 minutes	> 6 log
Campylobacter jejuni	Wild strain	EN 1276	5 minutes	> 6 log
Salmonella typhimurium	Clinical isolate	EN 1276	5 minutes	> 6 log
Klebsiella aerogenes	NCTC 9528	EN 1276	5 minutes	> 6 log
Staphylococcus aureus	NCTC 4163	EN 1276	5 minutes	> 6 log
HIV	Type 1 HTLV-IIIa	Inanimate environmental surface virucidal method	10 minutes	> 4 log
HBV	Duck Hep B	Inanimate environmental surface virucidal method	10 minutes	> 4.5 log
HBC	BVD surrogate	Inanimate environmental surface virucidal method	10 minutes	> 4 log
Candida albicans	ATCC 10231	EN 1650:1998	5 minutes	> 6 log

Full copies of independent test data summarised above validating RelyOn PeraSafe™ Liquid Sterilant efficacy and safety claims are available separately from DuPont RelyOn Prevention Solutions

Certification

RelyOn PeraSafe™ Liquid Sterilant is registered as a Class II Medical Device, in accordance with the relevant requirements of Council Directive 93/42/EEC (MEDICAL DEVICES DIRECTIVE). RelyOn PeraSafe™ Liquid Sterilant is manufactured using an ISO 13485:2003 Certified Management System. RelyOn PeraSafe™ Liquid Sterilant is a registered trademark of Antec International - A DuPont Company. ® and ™ indicate trademarks or registered trademarks of DuPont™ or its affiliates.



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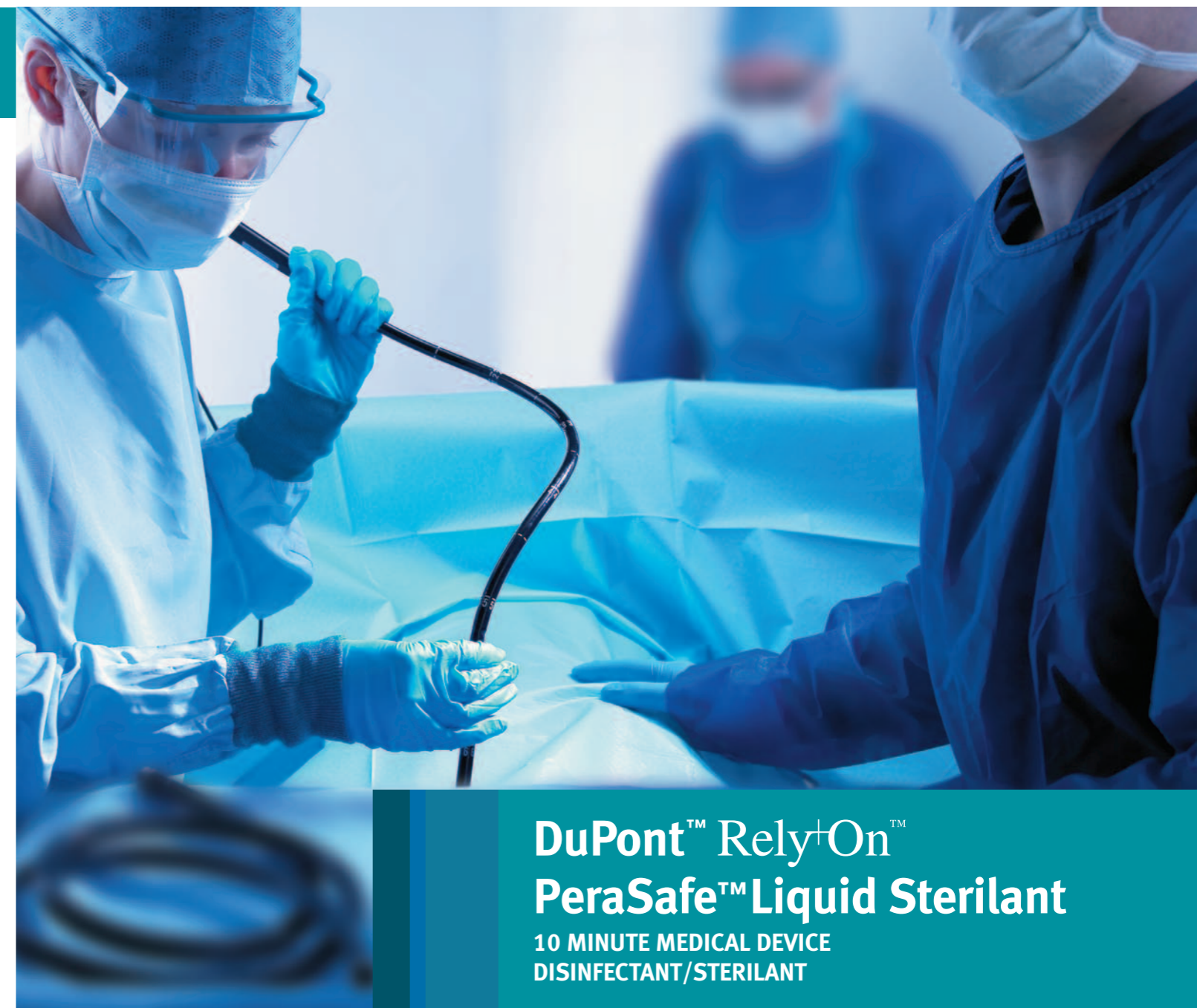
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Presentation

Base: colourless aqueous solution
 Activator: white (Single Use) or green (Multiple Use) opaque liquid.

Pack Size	Maximum Usage of RelyOn PeraSafe™ Liquid Sterilant
Single Use 2 X 5 litres	20 cycles in AER
Multiple Use 2 X 5 litres 2 x 30 ml Dispensers	165 Litres



DuPont™ RelyOn™
PeraSafe™ Liquid Sterilant
 10 MINUTE MEDICAL DEVICE
 DISINFECTANT/STERILANT

achieving new standards in medical device sterilisation



The miracles of science™

Distributed by:



DuPont™ Rely+On™ PeraSafe™ Liquid Sterilant



flexible endoscope
and medical devices

RelyOn PeraSafe™ Liquid Sterilant

- RelyOn PeraSafe™ Liquid Sterilant gives assurance to medical and infection control professionals for patient safety, avoids health hazards to staff and is cost effective in terms of infrastructure, staff health and device maintenance and repair.
- RelyOn PeraSafe™ Liquid Sterilant is proven effective against pathogens such as bacteria, viruses, fungi and spores that can be transmitted between patients via flexible endoscopes, ultra-sound probes and other reusable, non-invasive, heat sensitive medical devices. 10 minutes immersion achieves sterilant level decontamination across the microbiological spectrum.
- RelyOn PeraSafe™ Liquid Sterilant is compatible with, and approved by, manufacturers of medical devices and automated endoscope reprocessors and washer/ disinfectors. A unique corrosion inhibition system, allied to a neutral pH solution, optimises efficacy and compatibility.

RelyOn PeraSafe™ Liquid Sterilant is a rapid, medical device compatible, chemical sterilant.

RelyOn PeraSafe™ Liquid Sterilant is available as both Single Use and Multiple Use, utilising the same technology for in-situ generation of a peracetic acid based disinfectant solution.

Single Use can be applied to Endoscope Reprocessors that automatically prepare disinfectant solutions that are discarded and replenished each decontamination cycle. RelyOn PeraSafe™ Liquid Sterilant Multiple Use is used in Endoscope Reprocessors in which the disinfectant cycle is recycled or in immersion baths for manual decontamination.

Multiple Use solutions are easy to prepare requiring minimal PPE and ventilation being almost odour-free and contain no toxic or sensitising chemicals.

RelyOn PeraSafe™ Liquid Sterilant is supplied as a two component pack with equal volumes of Base and Activator diluted with tap water to form an effective yet user, device and environmentally friendly solution.

General Description

RelyOn PeraSafe™ Liquid Sterilant is a unique binary system for in-situ generation peracetic species consisting of Base and Activator which, when diluted in water, produce a disinfectant solution sixteen times the original volume, saving storage space compared to ready to use solutions.

Chemistry

RelyOn PeraSafe™ Liquid Sterilant generates peracetic acid and peracetyl ions in solution at a neutral pH which act as an effective biocide over the whole microbiological spectrum without the noxious odour and compatibility concerns of preformed peracetic acid.

Compatibility

RelyOn PeraSafe™ Liquid Sterilant is compatible with flexible and stainless steel rigid endoscopes. RelyOn PeraSafe™ Liquid Sterilant should only be used in AER's with stainless steel or inert material valves and pipework.

surgical instruments



Mode of Action

Peracetic acid and peracetyl ions oxidise many of the cellular and intracellular functional groups such as proteins and enzymes found in micro-organisms and viruses. Disruption of cell walls arises from oxidation of bonds within proteins. Intracellular function is also impaired through oxidation of enzymes. Through this disruptive mode of action, resistance to RelyOn PeraSafe™ Liquid Sterilant is unlikely to develop as with protein fixing and biocides which disrupt metabolic function.

Presentations

RelyOn PeraSafe™ Liquid Sterilant Single Use: 5 litres each of Base and Activator. Makes 20 single use solutions in an Endoscope Reprocessor.

RelyOn PeraSafe™ Liquid Sterilant Multiple Use: 5 litres each of Base and Activator. Makes 165 litres of disinfectant solution.

Multiple Use solutions are supplied with two 30 ml dispensers. 30 ml of Base and Activator per 1 litre of solution allows flexibility of volume prepared.

Efficacy

RelyOn PeraSafe™ Liquid Sterilant has independently proven efficacy against viruses (including HIV and Hepatitis B & C), bacteria (*Ps. aeruginosa*), Mycobacteria, fungi (*Candida albicans*) and spores (*B. subtilis*). These tests show rapid sterilant properties across a wide spectrum of micro-organisms making RelyOn PeraSafe™ Liquid Sterilant ideal for endoscope and medical device decontamination.

RelyOn PeraSafe™ Liquid Sterilant has been independently evaluated by HIRL in the UK. HIRL found a reduction in colony forming units of $> 6 \log_{10}$ for *Bacillus subtilis* var niger spores in less than 5 minutes (suspension test) and a reduction of $>5 \log_{10}$ c.f.u. for *Mycobacterium terrae* in a suspension test under organic challenge with 10 minutes contact time. These results prove RelyOn PeraSafe™ Liquid Sterilant rapid efficacy and suitability for endoscope reprocessing.

Safety

RelyOn PeraSafe™ Liquid Sterilant has exceptional user safety as an aqueous-based degradable formulation. Peracetic acid is not subject to work place exposure limits. No special ventilation systems or monitoring of staff is necessary, saving costs and improving working conditions.

Life of Solution

A RelyOn PeraSafe™ Liquid Sterilant Multiple Use pack makes a total 165 litres of recyclable solution. Each Multiple Use solution is usable for 24 hours from activation.

Product shelf-life

RelyOn PeraSafe™ Liquid Sterilant shelf-life is one year from date of manufacture.

Multiple Use - Easy to prepare



Step 1
Dispense 30 ml each of Activator and Base per 1 litre of working solution into a measuring cylinder. e.g 450 ml each of Activator and Base for 15 litres of solution.



Step 2
Fill jug or bath with 4.7 litres of lukewarm tap water per 5 litres of working solution. e.g. 4.7 l x 3 (14.1l) to make 15 litres of working solution.



Step 3
Decant Activator into water in jug or bath followed by Base. Mix thoroughly until a clear blue solution is formed (10-15 minutes).



Step 4
Pour the solution into an immersion bath or endoscope reprocessor for use. Shortly after activation the solution fades to colourless. Solutions are usable for 24 hours after the clear blue solution is achieved.