

Broad spectrum activity in high risk conditions against viruses, mycobacteria, fungi and bacterial organisms



**Better for you**

Safe to use  
Economical with 1:100 dilution



**Better for your surfaces**

Micro-emulsion technology for a thorough disinfection  
Suitable and safe for frequent use on most natural and synthetic surfaces



**Better for the environment**

Non-toxic  
Biodegradeable



High level disinfection

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**SteriGENE<sup>®</sup>**

HIGH LEVEL DISINFECTION 



**Better for you**



**Better for your surfaces**



**Better for the environment**





## Micro-emulsion particles carry disinfectant molecules through cell walls

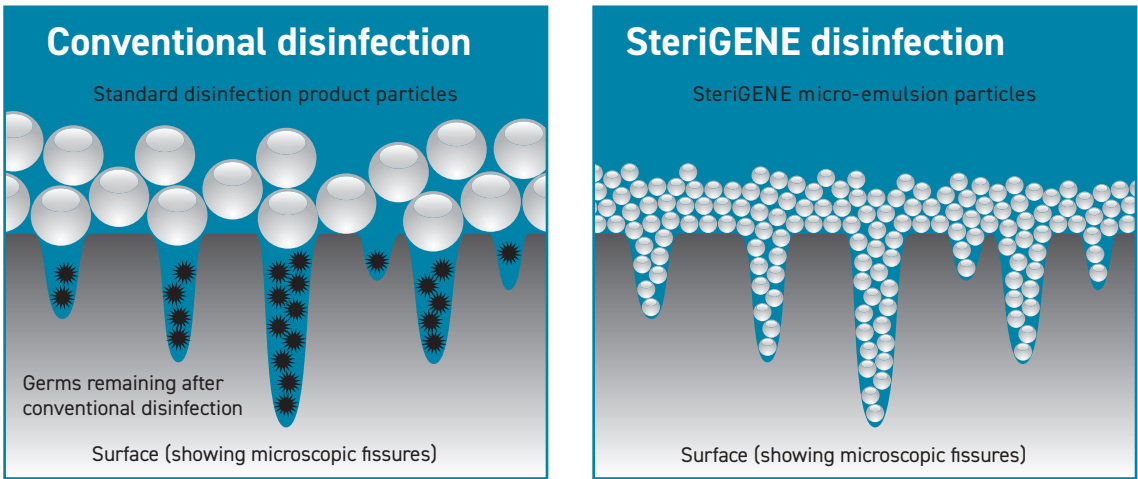
At the heart of the all-new SteriGENE formula are the micro-emulsion particles (Nano particles) that enable the active ingredient molecules in the product to be carried rapidly through cell walls of micro-organisms.

Rapid penetration of cell walls by the powerful SteriGENE disinfectant constituents ensures cell death is equally rapid. SteriGENE works up to 70% quicker than conventional high level disinfectants and achieves apoptosis (cell death) rather than merely suspending activity as with conventional disinfectant products.

### Micro-emulsion particles can enter microscopic surface fissures

Because the Nano Particles can enter areas like microscopic fissures and crevices in hard surfaces, which have not hitherto been penetrable by conventional carrier systems, disinfectant actives are able to spread across a complete surface area, to perform a far more thorough anti pathogenic cleansing task than was previously possible.

The synergistic blend of SteriGENE active ingredients produces the fastest acting and most efficient anti viral and sporicidal agent presently available in non-oxidising disinfectant technology.



## A safer to use disinfectant all round

Health and safety issues and product compatibility are of real importance to everyone. EA International encourages all users of chemical products to pay special attention to the advisory statements within Material Safety Data Sheets and on product labelling.

### Lower levels of actives and safety of nano particles

SteriGENE is able to rely on lower levels of active ingredients than previously used, due to the formulation's revolutionary method of delivering diluted disinfectant to the cells of micro-organisms. The simple prokaryotic cellular structure of micro-organisms provides little resistance to the active ingredients of SteriGENE but the hugely more complex eukaryotic structure of the mammalian cell membrane means SteriGENE is not cyto-toxic to mammalian tissue. Using the new system in the presence of human and animal skin is therefore of low risk. Notwithstanding this, instructions should always be followed carefully and gloves worn where advised.

### Material compatibility

Independent laboratory testing demonstrates no corrosion or deterioration of the following materials, even after long-term repeated immersions: Rubber compounds, Plastics, Fibreglass, Stainless Steel, Mild Steel, Aluminium, Copper, Brass and other materials found in clinical practice, in particular synthetic floors, instruments and devices.

## Material safety data sheet extracts (concentrate)

### Exposure controls

- Skin contact:** Low risk – may degrease skin leading to dryness if excessive contact.
- Eye contact:** Low risk – may cause temporary discomfort.
- Inhalation:** Low risk – avoid inhalation of fine mist spray.
- Inhalation (long term):** Low risk – avoid inhalation of fine mist spray.
- Ingestion:** Low risk – substantial ingestion will cause discomfort to mouth and digestive tissues.

### Physical and chemical properties

pH: 5.5 (approx)

### Toxicological information

**Human Studies:** 4 hour and 20 hours patch tests have shown minor skin reddening but no harmful effects.

### Transport information

No special conditions apply. Not dangerous.

### Accidental release measures

- Environmental precautions:** Product is biodegradable under OECD conditions operational 6/1995.
- Clean up method:** Flush to drain with copious water or soak up onto inert material.

### Ecological information

- No known adverse effects from normal use.
- The SteriGENE formula fully meets the criteria of the European Biocides Regulations which came into force in 2007.
- SteriGENE has not been tested on animals to secure its supporting data.

## Selection of test results

ORGANISM	Dil'n	Method	Reduction
<b>Sporicidal Activity</b>			
Bacillus Subtilis	1:100	EN14347	>Log 6
Clostridium difficile	1:100	EN14347	>Log 5
Clostridium sporogenes	1:100	EN13704	>Log 6
Clostridium perfringens	1:100	EN13704	>Log 6
<b>Mycobactericidal Activity</b>			
Mycobacterium avium	1:100	EN14348	>Log 6
Mycobacterium bovis	1:100	EN14348	>Log 5
Mycobacterium fortuitum	1:100	EN14348	>Log 6
Mycobacterium terrae	1:100	EN14348	>Log 6
<b>Virucidal Activity</b>			
Hepatitis B	1:100	EPA Protocol	complete deactivation
Norovirus (Feline calicivirus)	1:100	EPA Protocol	complete deactivation
HIV	1:100	EPA Protocol	complete deactivation
Adenovirus type 5	1:100	EPA Protocol	complete deactivation
Coronavirus (SARS/COVID-19)	1:100	EPA Protocol	complete deactivation
H5N1	1:200	Harbin Veterinary Research Institute	Total kill
<b>Fungicidal Activity</b>			
Aspergillus niger	1:200	EN13624	>Log 4
Candida albicans	1:200	EN13624	>Log 4
Penicillium verrucosum	1:200	EN1675	>Log 4
Trichophyton rubrum	1:200	EN13624	>Log 4

ORGANISM	Dil'n	Method	Reduction
<b>Bactericidal Activity</b>			
Pseudomonas aeruginosa	1:200	EN1276 by HIRL	>Log 5
Staphylococcus aureus	1:200	EN1276 by HIRL	>Log 5
Escherichia coli	1:200	EN1276 by HIRL	>Log 5
Enterococcus hirae	1:200	EN1276 by HIRL	>Log 5
Pseudomonas aeruginosa	1:200	EN1276 by HIRL	>Log 5
Staphylococcus aureus	1:200	EN1276 by HIRL	>Log 5
Enterococcus hirae	1:200	EN1276 by HIRL	>Log 5
Acinetobacter calcoaceticus	1:200	EN13727	>Log 5
Campylobacter jejuni	1:200	EN13727	>Log 5
Enterococcus faecium	1:200	EN13727	>Log 6
Helicobacter pylori	1:200	EN13727	>Log 5
Klebsiella pneumoniae	1:200	EN13727	>Log 5
Legionella pneumophila	1:200	EN13623	>Log 6
Listeria monocytogenes	1:200	EN13727	>Log 6
MRSA	1:200	EN13727	>Log 6
Proteus vulgaris	1:200	EN13727	>Log 6
Salmonella dublin	1:200	EN13727	>Log 6
Salmonella enteritidis	1:200	EN13727	>Log 6
Salmonella typhimurium	1:200	EN13727	>Log 6
Serratia marcescens	1:200	EN13727	>Log 6

Tested by Warwick University to inactivate and destroy DNA/RNA

## Microbiological economy of use

Because required results are generated with higher dilutions of SteriGENE, greater economies are effected at point of use. For example, an acceptable 'kill' rate for Parvo virus is widely accepted as 99.99% (log 4) in a thirty minute exposure. This corresponds to the test protocol used by the UK Animal Health Institute and to the protocol accepted world-wide under EPA conditions.

SteriGENE produces a 99.999+% (log 5+) kill rate in Parvo under the EPA protocol at a dilution of 1:100 (1 part disinfectant in 100 parts water).

## True broad spectrum activity

Users of disinfectants in both animal and human hygiene environments require maximum protection from the use of a disinfectant with proven independent microbiological test certification. Many disinfectants require strong dilutions for critical risk areas like Parvovirus or TB, yet are marketed for use at much weaker dilutions for "broad spectrum activity", putting both the practice and patients at risk of cross infection.

SteriGENE users can rely on one dilution (1:100) for broad spectrum activity (supported by independent testing) in high risk conditions against viruses, mycobacteria, fungi and bacterial organisms and another for economic general purpose disinfection (1:200) in intermediate risk areas.

AREA OF USE	Recommended Dilution	ml per 5 litre	ml per 500ml
Personal protective clothing	1:100	50ml	5ml
Boots / footwear	1:100	50ml	5ml
Gloves	1:100	50ml	5ml
Breathing apparatus, respirators, face masks	1:100	50ml	5ml
Emergency and accident rescue equipment	1:200	25ml	n/a
Vehicle interiors	1:200	25ml	n/a
Floors / walls	1:200	25ml	n/a
Personal decontamination	1:50	100ml	10ml
Body spills (blood, urine, vomit)	1:50	100ml	10ml

## Worktops/equipment

Wash down all surfaces with SteriGENE at 1:100 and dry with paper towel or allow to dry naturally. Alternatively use SteriGENE in RTU (ready to use) trigger spray and wipe excess moisture with paper towel and allow to dry. SteriGENE wipes can also be used to wipe surfaces.

## Device immersion

Non-critical devices can be soaked in SteriGENE if required during a period of high risk in a solution of 1:100 for 20 mins. Fabrics can be soaked in a solution of SteriGENE at 1:100 for 10 minute. They can also be washed in an automatic washing machine using 50ml per 4kg load during a normal washing cycle.

## Floor, walls

For general washing of floors and surfaces use SteriGENE at 1:200. Use with mop and bucket on floors, remove excess moisture and allow to dry. Wash other surfaces, rince where necessary and remove excess moisture and allow to dry.

## Fogging and pressure washing

Where applicable SteriGENE can be used in pressure washing machines at a dilution of 1:200, rinsed and allowed to dry. Where aerial fogging is required, non-fragranced product should be used at a dilution of 1:200. masks should be worn and the area vacated until dry.

## Additional information

Certified for use on Boeing aircraft D6-7127 rev M.  
NATO stock code 6850-99-439-7179

## Presentation

250ml, 1 L, 2 L, 5 L, 20 L  
1:10 impregnated wipes.  
500ml RTU sprayer.

SteriGENE is MPI recognised for use in dairy processing, is AsureQuality approved and TGA registered as a hospital grade disinfectant.

