



Virusolve[®]+ EDS Auto

Concentrated High Level Disinfecting (Sterilant) Fluid for Automated Reprocessing of Endoscopes & Medical Instruments Technical Information

Description & Application:

Virusolve+ EDS Auto is a superior high level disinfectant (HLD) (Sterilant) that is designed for use in Automated Endoscope Reprocessor (AER) equipment for the decontamination of endoscopic instruments.

Virusolve+ EDS Auto formulation does not contain any hazardous aldehydes or chlorine generating components. This formulation is a highly effective and safe process for the automated disinfection of endoscopes.

Virusolve+ EDS Auto is safe to use on ALL flexible and rigid endoscopes.

Primary features attributable to Virusolve+ EDS Auto are:

- High Level Disinfectant (Sterilant);
- Highly effective and suitable for all brands of Automated Endoscope Reprocessor (AER);
- Enhanced safety:
 - Low toxicity;
 - No Glutaraldehyde or other Aldehyde compounds;
 - No per-Oxygen compounds
 - Odourless;
- Highly effective over a wide range of bacterial spores, mycobacteria, viruses, bacteria and fungi;
- Effective against the difficult non-enveloped type viruses such as Polio and Adenovirus;
- Excellent material compatibility;
- Non-fixative;
- Non-corrosive;
- Increased speed and efficiency:
- Rapid reaction time – 10 minute immersion at 25 °C;
- Cost effective.



Certificate No. GB06/69741



Certificate No. GB06/69740

CE
0120

Certificate No. GB06/69739

**Infection
Controlled**

Applications

Virusolve+ EDS Auto is ideal for removing biohazards from flexible and rigid endoscopes and other equipment used in hospitals, health centres, dentists and laboratories.

Compatibility

Virusolve+ EDS Auto is compatible with all flexible and rigid endoscopes at the recommended dilution rate and contact time.

Health and Safety

Virusolve+ EDS Auto is not flammable and is neither a known or suspected carcinogen and is biodegradable.

Virusolve+ EDS Auto is certified as being non-hazardous when used according to the specified user directions.

Virusolve+ EDS Auto is intended for external use only.

In the 'concentrate' form the product is classed as being corrosive and irritant and contact with skin and eyes should be avoided, however once diluted to working strength the solution is classed as mildly irritant.

See Material Safety Data Sheets for details.

Typical Properties

Appearance	Clear pale yellow-brown liquid
Odour	Slight amine odour
pH,	12.5 units (neat) 11.7 (10% solution) 11.3 (2.5% solution) 11.0 (1% solution)
Density, g/cm ³ @ 20 °C	1.05 (neat)
Solubility in water	Complete
Flash Point (Abel closed cup)	None

Shelf Life: **Concentrate** – 3 years in unopened original containers when stored between 5 °C and 35 °C out of direct sunlight.

Virusolve+ EDS Auto has been thoroughly tested by independent laboratories and demonstrated to be effective spores, bacteria, mycobacteria, viruses and fungi/yeasts.

Efficacy data has been raised against the following specific organisms:

Bacteria:

- Enterococcus hirae
- Escherichia coli
- Methicillin resistant Staphylococcus aureus (MRSA)
- Pseudomonas aeruginosa
- Staphylococcus aureus

- Mycobacterium tuberculosis
- Mycobacterium terrae
- Mycobacterium avium

Viruses: -

Poliovirus-1
 Feline Calicivirus (Human norovirus surrogate)
 Adenovirus-5
 Bovine parvovirus
 HIV
 Hepatitis B
 Hepatitis C

Spores:-

Clostridium difficile
 Bacillus cereus

Fungi and Yeasts: -

Aspergillus fumigatus
 Aspergillus niger
 Candida albicans

Directions for Use

Virusolve+ EDS Auto is supplied as a concentrated product that requires dilution prior to use.

Concentrate dilution:

For HLD (Sterilant) applications, dilute 1 part Virusolve+ EDS Auto concentrate in 40 parts water (i.e. a 2.5% solution or 25ml/Litre)

Application:

For Disinfection of endoscopic instruments and equipment:

CHEMICAL REPROCESSING OF INSTRUMENTS STAGE TWO – HIGH LEVEL DISINFECTION

Instruments and devices that are non-autoclavable, particularly those, which are heat-sensitive or delicate in nature (flexible and rigid endoscopes, etc.); require disinfection with specially designed chemical alternatives like Virusolve+ EDS Auto.

Virusolve+ EDS Auto (HLD (High Level Disinfectant)) is recommended for use, as follows: -

A recommended automated cleaning cycle is as follows:

AER equipment					
Phase	Water type	Time	Temp	Detergent	Dosage
Pre-wash	Cold tap water	3 min	-	-	-
Wash	Hot tap water	10 min	30 - 55°C	Viruzyme**	5 to 10ml / L (0.5 – 1%)
Rinse	Hot water	1 min	-	-	-
High level disinfection	DI / RO water	5 - 10 min	25°C	Virusolve+ EDS Auto	25ml/L (2.5%)
Rinse	DI / RO water	1 min	-	-	-
Rinse	DI / RO water	1 min	-	-	-

Amity would recommend to conduct the MEC test at least once per day.

Notes

- Alternative Stage I cleaners for wash cycle is Virudet N or Viruzyme N.
- Ensure that all internal channels are flushed through.
- On completion of the AER cycle - dry and then store for re-use.

Changing from an Aldehyde based disinfectant (Glutaraldehyde and OPA) to Virusolve+

The aldehyde will be absorbed into the walls of all plastics including flexible endoscopes and if no pre-treatment is carried out there will be a chemical reaction which can cause discolouration. To prevent this Amity would recommend to soak all plastic instruments, syringing tubes, connection tubes, flexible endoscopes etc in a solution of Viruzyme III diluted to 1% (10ml/litre) for a minimum time of 3-4 hours but this could be extended to an overnight soak. Then rinse thoroughly.

This should eliminate 99% of the possible reaction occurring.

Disposal of spent solutions:

Flush to drain with copious water or soak up onto inert material and dispose of with clinical waste

Product is biodegradable under OECD conditions.

Analysis

When required by users, Virusolve+ EDS Auto solutions may be checked for concentration using the procedure set out in Product Information Bulletin Sheet (PIBS) including MEC Strip.

CONTACT DETAILS:

For UK and Rest of the World:

Amity International,
Libra House, West Street,
Worsborough Dale,
BARNSELY
S YORKS, S70 5PG,
ENGLAND

Tel: +44 (0) 1226 770787

Fax: +44 (0) 1226 770757

For North America:

Amity International,
PO Box 5254,
1704 Denver Road,
ANDERSON,
SOUTH CAROLINA,
SC29623, USA.

Tel: 864 622 2233

Fax: 864 622 2234

E-mail: sales@amityinternational.com

Web site: <http://www.virusolve.com>

For any further information, please contact your distributor or Amity.

In the event of any technical queries, please contact:
Mr. Ram Singh at the UK/ROW address or by e-mail to:

rsingh@amityinternational.com

Packaging Details:

Virusolve+ EDS Auto is available in the following packaging.

Users will need to specify requirements on their order.

As a Concentrate in:

- 5 Litre containers
- 10 Litre containers (available on application, subject to minimum order quantity)
- 25 Litre containers

Approval and Test Data for Virusolve+ EDS Auto

1. Approvals.

- 1.1 Virusolve+ EDS Auto has been satisfactorily tested by leading laboratories for virucidal, bactericidal, sporicidal and fungicidal testing.
- BluScientific (Glasgow Caledonian University)
 - H.I.R.L (Hospital Infection Research Laboratory) City Hospital Birmingham
 - Abbot Analytical
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2. Test compliance

- 2.1 Testing carried out according to EN 13624, EN 13704, EN 13727, EN 14347, EN 14348, EN 14476, EN 14561, EN 14562, EN 14563
- 2.2 Virusolve+ EDS Auto has been tested for bactericidal efficacy according to EN 1276 (European Suspension Test) and demonstrates a $> \log 5$ reduction in counts at 20 °C for all three time intervals selected.
- 2.3 Basic fungicidal and yeastical activity tested in accordance with EN 13624 (European Suspension Test) and demonstrates a $> \log 5$ reduction in counts at 20 °C after 1, 2 and 5 minute contact times.
- 2.4 Sporicidal Efficacy tested in accordance with EN 14347 and achieved $>5 \log 10$ reduction in all test organisms for all contact times down to 1 minute.
- 2.5 Sporicidal Efficacy tested in accordance with EN 13704 and achieves a $>3 \log 10$ reduction in all test organisms for all contact times down to 2 minute.
- 2.6 Virucidal activity tested according to EN 14476 and passes requirement ($> 4 \log 10$ reduction at 5 minute exposure).
- 2.7 Bactericidal Efficacy for disinfection of medical instruments tested in accordance with EN 13727 and achieved $>5 \log 10$ reduction in all test organisms.
- 2.8 Virucidal efficacy against Hepatitis B, Hepatitis C and HIV.
- 2.9 Feline calicivirus (Human norovirus surrogate), polio virus and adenovirus tests carried out in accordance with test standards EN 14476.