



## Virusolve<sup>®</sup> + RTU

# Specialized Ready-to-Use Cleaning and High Level Disinfecting Fluid

## Technical Information

### Description & Application:

Virusolve+ RTU is a patented proven HLD (High Level Disinfectant) and is confirmed as non-hazardous and biodegradable. The formulation does not contain any hazardous aldehydes or chlorine generating components.

The formulation is highly effective as a cleaner and terminal HLD against bacterial spores, mycobacteria, bacteria, fungi and viruses. The product is designed to eliminate the risk of cross-infection from spores, TB, viruses, fungi and bacteria.

Virusolve+ does not simply render the microorganisms inert but has been demonstrated to kill these by disrupting the RNA of the microorganisms. It is safe to use on any surface and is odourless and colourless.

Primary features attributable to Virusolve+ RTU are:

- High Level Disinfection and cleaning;
- Does not contain chlorine or aldehyde compounds;
- Effective against bacterial spores e.g. Clostridium difficile (C dif), Bacillus cereus etc
- Effective over a wide range of pathogens including mycobacteria, viruses, bacteria, fungi, yeasts and moulds, including MRSA, Hepatitis B and HIV;
- Effective against the difficult non-enveloped type viruses such as Polio, Adenovirus and Norovirus;
- Non-selective;
- Versatile, simple to use
- Cost effective.

### Applications

Virusolve+ RTU is ideal for removing biohazards in hospitals, health centres, dentists, vets, nursing homes, laboratories, food preparation areas and any environment where the risk of cross-infection needs to be eliminated, e.g. cruise ships, disinfecting hairdressing equipment etc.

Virusolve+ RTU is ideal for the cleaning and disinfection of hard surfaces, walls, floors and glasswork. Virusolve+ RTU is ideal for HLD (High Level Disinfection) of medical devices and surgical instrumentation.



Certificate No. GB06/69741



Certificate No. GB06/69740

CE  
0120

Certificate No. GB06/69739

**Infection  
Controlled**

## Compatibility

Virusolve+ RTU is compatible with a wide range of fabrics, rubbers, plastics and hard surface materials.

## Health and Safety

Virusolve+ RTU is hypoallergenic and biodegradable.

Virusolve+ RTU is certified as being non-hazardous.

Virusolve+ RTU is intended for external use only.

See Material Safety Data Sheets for details.

## Typical Properties

|                                    |                            |
|------------------------------------|----------------------------|
| Appearance                         | Pale straw coloured liquid |
| Odour                              | odourless                  |
| pH,                                | 11.3 units (neat)          |
| Density, g/cm <sup>3</sup> @ 20 °C | 1.01 (neat)                |
| Solubility in water                | Complete                   |
| Flash Point (Abel closed cup)      | None                       |

### Shelf Life

3 years in unopened original containers when stored between 5 °C and 40 °C out of direct sunlight.

Virusolve+ RTU destroys bacteria and viruses; offers up to a 7 day residual action.

Virusolve+ RTU will inactivate the cell to the point where the RNA is destroyed and therefore preventing replication.

Virusolve+ RTU will also attack all single strand transcriptase positive and transcriptase negative viruses within similar families.

Efficacy data has been raised against the following specific organisms:

Bacteria:

- Acinetobacter calcoaceticus
- Bacillus stearothermophilus
- Bacillus cereus
- Campylobacter jejuni
- Clostridium difficile
- Clostridium perfringens
- Enterobacter sakazakii
- Enterococcus hirae
- Enterococcus faecalis Vancomycin Resistant (VRE)
- Escherichia coli
- Escherichia coli ESBL (Extended Spectrum beta-Lactamases)
- Escherichia coli - O157 Strain
- Legionella pneumophila (Sero Group 1)
- Listeria monocytogenes
- Methicillin resistant Staphylococcus aureus (MRSA)
- Pseudomonas aeruginosa
- Salmonella typhimurium
- Serratia marsescens

Shigella sonnei  
Stenotrophomonas maltophilia  
Staphylococcus aureus  
Vibrio parahaemolyticus  
Yersinia enterocolitica

Mycobacterium terrae (Note – has been used for testing against TB)  
Mycobacterium tuberculosis  
Mycobacterium avium

Viruses: -

Avian flu (Bird Flu – Strain H5N1)  
Hepatitis B and C  
HIV-1 virus  
Influenza virus (Strain H3N2)  
Parainfluenzae 3 virus,  
Polio virus  
Vaccinia virus,  
Feline Calicivirus (Human norovirus surrogate)  
Adenovirus

Spores:-

Bacillus cereus  
Clostridium difficile  
Clostridium perfringens

Fungi and Yeasts: -

Aspergillus niger  
Candida albicans  
Microsporum canis  
Microsporum gypseum  
Trichophyton equinum  
Trichophyton mentographytes



## **Directions for Use**

Virusolve+ RTU is supplied ready to use direct from the container.

### **Application:**

#### **General Surface Cleaning and Healthcare Environment:**

**For Intermediate Level Disinfection: Dilute Virusolve+ RTU to 10% with water (100ml per litre) at 20°C**

**For High Level Disinfection: Use Virusolve+ RTU as supplied direct from the container at 20°C**

Dispense / Spray (DO NOT MIST) Virusolve+ RTU solution directly onto the surface to be treated and wipe gently over the whole area with a clean low lint cloth.

Allow a minimum contact time of 1 minute before wiping clean or brushing to remove grease, blood and organic debris. Removal of stubborn deposits may be assisted by the use of a stiff bristle brush. Rinse treated surface with clean water if required. Vinyl surfaces must be rinsed to avoid discolouration.

#### **Medical Devices**

##### **For Manual Disinfection of instruments and equipment:**

###### **Stage 1:**

Put on PPE and wash medical device carefully in an Enzymatic cleaner and rinse

Note: The enzymatic cleaner recommended by Amity is as follows:

- Dismantle (and subsequently reassemble) the device, if necessary
- For automated processes use either Viruzyme, Viruzyme N, Virudet N or for the most arduous cleaning use Duo system
- For manual cleaning use Viruzyme III or Virudet N

###### **Stage 2:**

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

Virusolve+ RTU (High Level Instrument Disinfectant) is recommended for use, as follows: -

- Make sure that instrument has been thoroughly cleaned (see STAGE ONE above)
- Soak for 5 - 10 minutes making sure that all internal channels are flushed through. This ensures bactericidal, fungicidal, virucidal, mycobactericidal and sporicidal performance is attained.  
**Note:** Ensure that all spaces and recesses are completely filled with Virusolve+ RTU fluid and no air pockets exist
- Rinse in sterile water and dry with sterile material
- The medical device is now ready for use

##### **For non-critical medical devices:**

- Inspect device / instrument.
- Wipe thoroughly with Virusolve+ Wipes and repeat using fresh wipe(s).
- Allow to air dry
- Place in suitable holder until required for use

#### **Food Sector**

##### **Food Preparation Surfaces**

**For Intermediate Level Disinfection: Dilute Virusolve+ RTU to 10% with water (100ml per litre) at 20°C**

**For High Level Disinfection: Use Virusolve+ RTU as supplied direct from the container at 20°C**

Dispense / Spray (DO NOT MIST) Virusolve+ RTU solution directly onto the surface to be treated and wipe gently over the whole area with a clean low lint cloth.

Allow a minimum contact time of 1 minute before wiping clean or brushing to remove grease, blood and organic debris. Removal of stubborn deposits may be assisted by the use of a stiff bristle brush.

Rinse treated surface with clean water if required.

Note: Food preparation surfaces should be allowed to dry before use.

**COP (Clean Out of Place)**

Instruments and devices that require disinfection with specially designed chemical alternatives like Virusolve+ RTU

Virusolve+ RTU is recommended for use, as follows:

**For Intermediate Level Disinfection: Dilute Virusolve+ RTU to 10% with water (100ml per litre) at 20°C**

**For High Level Disinfection: Use Virusolve+ RTU as supplied direct from the container at 20°C**

- Make sure that instrument has been thoroughly cleaned
  - Soak for 5 - 10 minutes in the Virusolve+ RTU solution, making sure that all internal channels are flushed through. This ensures bactericidal, fungicidal, virucidal, mycobactericidal and sporicidal performance is achieved
- Note:** Ensure that all spaces and recesses are completely filled with Virusolve+ RTU fluid and no air pockets exist
- Rinse in sterile, Deionised (DI) or Reverse Osmosis (RO) water and dry

**CIP (Clean In Place)**

**For Intermediate Level Disinfection: Dilute Virusolve+ RTU to 10% with water (100ml per litre) at 20°C**

- Flush for 30 minutes making sure that all internal channels are flushed through.
- Ensure that all spaces and recesses are completely filled with Virusolve+ RTU fluid and no air pockets exist
- Rinse is optional
- Allow to dry

## **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](mailto:sales@amityinternational.com)

**Web site:** <http://www.amityinternational.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, above, or by e-mail to:

[rsingh@amityinternational.com](mailto:rsingh@amityinternational.com)

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## **Packaging Details:**

**Virusolve+** RTU is available in the following packaging.

- 750ml Trigger Pack unit (pack of 12 x 750ml)
- 5 L container
- 25 L container
- 210 L Drum (supplied subject to special order)
- 1,000 L IBC (supplied subject to special order)

Note: Also available as a Pre-impregnated RTU Wipe – refer to separate technical data Sheet

## **Approval and Test Data for Virusolve+**

### **1. Approvals.**

- 1.1 Virusolve+ has been satisfactorily tested by leading laboratories for viral, bacterial and fungi testing.
- Micropathology Ltd, Coventry;
  - H.I.R.L (Hospital Infection Research Laboratory) City Hospital Birmingham
  - Bodycote Materials Testing, Law Laboratories, Birmingham.
  - Texcell Laboratory (Part of Institute Pasteur®), Paris, France
  - Health Protection Agency, UK.
  - Retroscreen Virology Ltd (Queen Mary Hospital, University of London)
- 1.2 Virusolve+ Concentrate has been satisfactorily tested as a disinfectant and approval granted by the UK Department for Environment, Food and Rural Affairs (DEFRA) for the following:
- General Orders, as defined in the Diseases of Animals (Approved Disinfectant) Order 1978 at a dilution of 1 part disinfectant to 19 parts of water.
  - The Disease of Poultry Order and The Avian Influenza and Influenza of Avian Origin in Mammals Order at a dilution rate of 1 part disinfectant to 9 parts of water.
- 1.3 Virusolve+ Concentrate has been satisfactorily tested as an Intermediate Level disinfectant against Tuberculosis at a dilution of 0.25% following a contact time of 15 minutes.

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### **2. Test compliance**

- 2.1 Testing carried out according to EN 1275, EN 1276, EN 1650, EN 13704, EN 13727, EN 14347, EN 14348, EN 14476, AFNOR procedures
- 2.2 Virusolve+ has been tested for bactericidal efficacy according to BS 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 yeactical activity tested in accordance with BS EN 1275 (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 BS 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 BS EN 13704 and achieves a >3 log 10 reduction in all test organisms for all contact times down to 1 minute.
- 2.6 Virucidal activity tested according to norm NFT 72-180 and passes requirement (> 4 log 10 reduction at 1 minute exposure).
- 2.7 Bactericidal Efficacy for disinfection of medical instruments tested in accordance with BS EN 13727 and achieved >5 log 10 reduction in all test organisms.
- 2.8 Bactericidal and Fungicidal Efficacy in food, industrial and institutional areas tested in accordance with BS EN 13697 and achieved >5 log 10 reduction within a 5 minute contact time.
- 2.9 Complies with BS ISO 4120:2004, food taint test.
- 2.10 Feline calicivirus (Human norovirus surrogate), polio virus and adenovirus tests carried out in accordance with test standards EN 14476.
- 2.11 Bactericidal efficacy against Mycobacterium tuberculosis established using BS EN 14348.
- 2.12 Bactericidal efficacy against Mycobacterium tuberculosis following a contact time of 15 minutes and at a dilution concentration of 0.25% established.