

**Rely+On™
Virkon™**

**SARS-CoV-2,(Covid-19) is proven
inactivated at a dilution of
1:600 in 10 minutes or
1 minute at a dilution of 1:100 (1%)**

Q. Can We Apply Rely+On™ Virkon™ By Thermal Fogging Application?

We do not typically recommend the application by thermal fogging due to the high level of sensitive equipment in hospital and medical treatment areas. The fine droplets of a thermal fog could more easily penetrate such equipment. Rely+On™ Virkon™ is not guided for use with 'Medical Devices'. *(please refer to the guides)*

However, in exceptional circumstances, the product can be prepared and successfully applied through thermal fogging equipment, where the dilution recommended is 4% Rely+On™ Virkon™. The dilution has been calculated and tested to afford a balance of the disinfectant solution making contact with the prepared surfaces.

Thermal Fogging Equipment

There is various thermal fogging equipment available. It is recommended to select equipment with 'stainless steel' working parts which are available from suppliers such as Igeba® and PulsFog®. Equipment with 'brass' working parts can be used but this soft metal will be compromised, over time, by the acid solution. Always rinse equipment with potable water after use.

Static and hand held thermal foggers are available. Hand held foggers (which can also be placed in locations to dispense the prepared disinfection solution) typically have 5 to 10 litre 'product tanks' and dispense the 'fog' at approximately 12 litres per hour – up to 40 litres per hour, depending on the models chosen and nozzle/droplet size selected. It is advisable to be aware of the fuel tank capacity to balance fuel use with the 'fogging' period, or the operator may run out of fuel during the application.

Fog Enhancer

To create an 'artificial smoke' and assist emulsifying the dispensed disinfectant solution, or the 'fog', for an increased 'contact time' on the applied surfaces, Propylene Glycol is mixed with the prepared water based solution. The propylene glycol does not affect the efficacy of Rely+On™ Virkon™ and it has a good safety profile in use.

Application Rate & Solution Preparation

For the exceptional application, the recommendation is for 4% Rely+On™ Virkon™ in a blend of 90% water and 10% propylene glycol. Apply the prepared solution at 10 ml per m³* of air space

Mix Monopropylene glycol with Warm water at the ratio of 10 parts
Propylene glycol to 90 parts water

Add Rely+On™ Virkon™ solution to give a 1:25 (4%)
solution

Quantity of Solution required	Water	Propylene glycol
10 litres	9 litres	1 litre
25 litres	22.5 litres	2.5 litres
50 litres	45 litres	5 litres
70 litres	63 litres	7 litres
100 litres	90 litres	10 litres

Quantity of Solution	Rely+On™ Virkon™ inclusion rate
10 litres	400 grammes
25 litres	1.0 kg
50 litres	2 kgs
70 litres	2.8 kgs
100 litres	4 kgs

* Equivalent to approximately 1 litre of Virkon™ S solution per 20m² of floor space. The calculations in this table are a guide based upon UK conversion rates, and reflects usage in buildings with semi-porous surfaces. Please check your country/regional specific requirements.



The typical preparation is for 10 litres which is then added to the 'product' tank of the thermal fogger.

Larger volumes can be prepared and 'decanted' for use, however, only prepare larger volumes that will be used over a 12 hour period.

To prepare a 10-litre disinfectant solution with 4% Rely+On™ Virkon™ in 90%Water/10% Propylene Glycol

Preparation in a 'plastic' (or glass) jug/bucket of the desired volume and then tip the appropriate tank of the thermal fogging equipment



To prepare a solution from the powder, the operator should wear protective gloves, a face mask and protective eyewear. The powder can cause sensitising and irritation –read the “information for use”, leaflet in the pack.

- For a 10-litre prepared solution, fill a plastic jug with 9 litres of warm/tepid water (20°C to 25°C) and add 1 litre of Propylene Glycol.
- Measure 400 grams (4%) of Rely+On™ Virkon™ powder.
- Add the powder to the water/propylene glycol and stir slowly.
- Leave the powder to dissolve FULLY for 10 to 20 minutes and it will be a clear colour.



The Rely+On™ Virkon™ solution is now ready to use. Add into the appropriate tank of the Thermal Fogging Machine.



Under these exceptional circumstances we expect the operators to be in full personal protection equipment.

This is highly recommended for the operators with a higher level respirator than typically used with Rely+On™ Virkon™ due to the fine droplets produced in the thermal fog application.

For the areas with medical devices and sensitive equipment, we suggest this is covered during the thermal fog application. Once the fog has cleared, the covers can be removed and the equipment carefully disinfected with the approved product/s.

Please read and be aware of the Safety Data Sheets, the 'Information for use', product literature and supportive guides prepared during the current challenges of COVID-19. <https://coronavirus.lanxess.com>

Anthony Pearson
Head Technical Marketing Biosecurity and Hygiene
ACD,MPP
28.07.2020



Antec International Ltd.
Windham Rd, Chilton Ind. Est.
Sudbury, Suffolk, CO10 2XD
United Kingdom.

relyondisinfection@lanxess.com
www.relyondisinfection.com
+44(0)178377305

All rights reserved.

The information set forth herein is furnished free of charge and based on technical data that LANXESS believes to be reliable. It is intended for use by persons having technical skill, at their own risk. Because conditions of use are outside our control, LANXESS makes no warranties, expressed or implied, and assumes no liability in connection with any use of this information. Nothing herein is to be taken as a license to operate under, or a recommendation to infringe, any patents or patent applications.

The specified uses and registered claims for the product/s™ may vary from country to country. Please contact LANXESS directly to verify country-specific approved usages.

Use biocides safely. Always read the label and product information before use.

©2020 LANXESS Virkon™ and any associated logos are trademarks or copyrights of LANXESS Corporation. LANXESS™ and the LANXESS Logo are trademarks of LANXESS Deutschland GmbH. All trademarks are registered in many countries worldwide.