

Application and use guide

No need for rotation.

Independent studies have demonstrated that Virkon® S is less likely to lead to the development of acquired resistance when compared with certain other disinfectant chemistries, consequently removing the need for disinfectant rotation.

Superior operator safety.

Extensive investment has been made to assess the safety of Virkon® S users. The assessment demonstrates that Virkon® S is not corrosive to skin and does not cause sensitisation. A typical in-use dilution of 1:100 (1%) has been shown to be non-irritating to skin and eyes, and is not a sensitising agent.

Easy to transport and store.

Virkon® S can be transported conveniently and rapidly by rail, sea, and air. It is not classified as “dangerous for transport,” reducing the cost of shipment and negating the requirement to manage staff qualified in the shipment of dangerous goods. Due to the complexities and restrictions surrounding shipment of dangerous goods, shipment times can be prolonged.

The powder formulation of Virkon® S simplifies storage thanks to its stability. So it can be stored for long periods, making it ideal for stockpiling in bulk.

Biosecurity in a single pack.

Virkon® S offers farmers a convenient, multipurpose biosecurity system all in one pack for a wide range of applications:

- Surfaces
- Equipment
- Vehicles
- Aerial disinfection
- Water delivery systems



Surface and Equipment Disinfection

Surface Disinfection	Dilution Rate	Application
Routine disinfection for all surfaces, earth, wood, and concrete	1:100 (10 grams of Virkon® S to every 1 litre of water)	Using a pressure washer or other mechanical sprayer, apply Virkon® S solution at an application rate of 300ml/m².



Surface Application Usage Chart

To estimate the total surface area to be disinfected, including walls and ceilings, multiply the total floor area by 2.5.*

Surface Area to be Disinfected	Volume of Water Required	Dilution Rate	
		Routine Disinfection 1:100 (1%)	1:200 (0.5%)
		Quantity of Virkon® S to be added	
50m ²	15 litres	150g	75g
100m ²	30 litres	300g	150g
500m ²	150 litres	1.5kg	750g
1000m ²	300 litres	3kg	1.5kg
2500m ²	750 litres	7.5kg	3.75kg

1. Decide on the volume of disinfectant solution required at the appropriate dilution rate.
2. Measure out the appropriate quantity of Virkon® S powder to achieve the desired dilution rate.
3. Add the Virkon® S powder to the water and stir thoroughly to dissolve.
4. Using a pressure washer or other mechanical sprayer, apply Virkon® S solution at an application rate of 300ml/m².
5. All surfaces should be cleaned and allowed to dry prior to disinfection.

*This calculation is a guide based upon UK conversion rates, and reflects usage in buildings with semi porous surfaces. Please check your country-/ regional-specific requirements.

Equipment Disinfection

Equipment Disinfection	Dilution Rate	Application
Routine cleaning and disinfection of movable equipment	1:100 (10 grams of Virkon® S to every 1 litre of water)	Using a brush or pressure washer, wash all equipment in Virkon® S solution until visibly clean.

Disinfectant Boot Dips: Preparation and Use

Disinfection	Dilution Rate	Application
Routine disinfection of footwear	1:100 (10 grams of Virkon® S to every 1 litre of water)	Replace solution once it has either become soiled or after a period of 4–5 days.

Water System Disinfectant

Terminal and continuous disinfection — all water systems can potentially contain some viral and bacterial contamination, especially header tanks where dust and debris can accumulate. Disinfection will clean the system and eliminate viruses, bacteria, and fungal growth.

Water System Disinfection	Dilution Rate	Application
Terminal disinfection (between production cycles)	1:100 (1%)	Isolate header tank at the mains and drain off to drinker points farthest from tank. Clean out any gross soiling and debris. Refill with water and add the appropriate amount of Virkon® S powder, thoroughly stir and leave for 10 minutes. Release to fill the water system to all drinking points and leave for a minimum of 4 hours before draining the water system and all drinking points. Flush the system with clean water until the water is visibly clean.
Continuous disinfection	1:1000	Dose header tank as required or apply through water system dosing equipment.

Virkon® S Water Disinfection Usage Table

Litres of Water to be Disinfected	Dilution Rate		
	Routine Terminal 1:200	High Disease Risk Terminal 1:100	Continuous Water Disinfection 1:1000
	Quantity of Virkon® S to be added		
100 litres	500g	1 kg	100g
250 litres	1.25 kg	2.5 kg	250g
500 litres	2.5 kg	5 kg	500g
1000 litres	5 kg	10 kg	1 kg

Aerial Disinfection

Misting/Aerial Spraying, Cold and Thermal Fogging

To assist the control of organisms that may be introduced into a building during the set up procedure, and to disinfect inaccessible areas of the building and the air, use either a fine mist sprayer or thermal fogging machine to apply Virkon® S disinfectant solution evenly. Aerial disinfection may also help control any contamination introduced to the building surfaces by airborne particulate matter present within the environment.

Equipment Disinfection	Dilution Rate	Application
Misting / Aerial Spray	1:200	Using either a pressure washer or knapsack sprayer on its finest mist setting, apply 20ml of Virkon® S solution per m ³ of air space.*
Cold Fogging	1:100	Use a mechanical mister to apply the Virkon® S solution at a rate of 40ml per m ³ of air space.
Thermal Fogging	1:25 (4%) solution of Virkon® S in an 90:10 water: Virkon® S Fog Enhancer mixture	Using a suitable thermal fogging machine, apply the prepared solution at 10ml per m ³ of air space.

* 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.

Aerial Disinfection in the Presence of Livestock

- Virkon® S can be misted in the presence of pigs at a dilution rate of 1:200 (0.5%)
- A cold fogger or mister should be used.
- Always read the Virkon® S label to ensure regulatory compliance.

USE DISINFECTANTS SAFELY. ALWAYS READ THE LABEL AND PRODUCT INFORMATION BEFORE USE.





Antec International Limited
LANXESS Material Protection Products
Windham Road, Chilton Industrial Estate,
Sudbury, Suffolk, CO10 2XD
United Kingdom

Tel: +44 (0)1787 377305
biosecurity@lanxess.com
biosecuritysolutions.lanxess.com
lanxess.com



Distributed by:

NRM
PO Box 271, Canterbury,
Christchurch 8140, New Zealand

Freephone: 0800 800 380
Email: customerservices@nrm.co.nz
www.nrm.co.nz



Shaping the Future of Biosecurity

This information and our technical advice – whether verbal, in writing or by way of trials – is subject to change without notice and given in good faith but without warranty or guarantee, express or implied, and this also applies where proprietary rights of third parties are involved. Our advice does not release you from the obligation to verify the information currently provided - especially that contained in our safety data and technical information sheets - and to test our products as to their suitability for the intended processes and uses. The application, use and processing of our products and the products manufactured by you on the basis of our technical advice are beyond our control and, therefore, entirely your own responsibility. Our products are sold in accordance with the current version of our General Conditions of Sale and Delivery.

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

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

©2023 LANXESS. Virkon®, LANXESS, the LANXESS Logo and any associated logos are trademarks or copyrights of LANXESS Deutschland GmbH or its affiliates. All trademarks are registered in many countries worldwide.