

VIRKON[®] S

**POWERFUL BROAD SPECTRUM
MULTIPURPOSE VIRUCIDAL DISINFECTANT.**

Unique patented formulation
Effective against a broad spectrum of disease causing pathogens
Highly versatile - surface, equipment, water and aerial disinfection



Virkon[®] S, the premier broad spectrum virucidal veterinary disinfectant, is recognized by industry and governments worldwide as a disinfectant of choice for livestock disease prevention and control.

Virkon[®] S patented formulation is unique. No other disinfectant has the same powerful composition. In terms of efficacy Virkon[®] S has been proven highly effective against 100 strains of virus in over 19 viral families, 400 strains of bacteria and over 100 strains of fungi. This list of proven efficacy includes the major OIE List A diseases of concern; Avian Influenza (H5N1), Newcastle Disease, and Foot and Mouth Disease.

Virkon[®] S versatility provides the flexible solution for; surface, water and aerial disinfection, in hard water, on porous surfaces, at low temperatures and in the presence of organic challenge.



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Virkon® S

Virkon® S combines greater application flexibility and broad spectrum activity with efficacy against viruses, bacterial and fungi at low temperatures, in hard water, on porous surfaces and against organic challenge.

General Properties

- **Powerful** - independently proven effective against viral, bacterial and fungal disease causing organisms including the lethal H5N1 Avian Influenza Virus.
- **Fast-acting** - a one percent solution of Virkon® S is independently proven to kill bacteria with contact times as low as five minutes and the tough to kill parvovirus in ten minutes or less.
- **Versatile** - surface, equipment, vehicle, footdip, water delivery system and aerial disinfection.
- **Independently proven effective** on porous surfaces, in hard water, at low temperatures and in the presence of organic challenge.
- **Readily soluble in tap water**, Virkon® S dissolves into a pink solution.
- **An environmentally acceptable product** with an exceptional safety profile towards man and animals when used and disposed of as instructed on the label.
- **Transport and storage** - being a powdered disinfectant formulation Virkon® S can be swiftly transported by air and can be stored for long periods making it the ideal choice for stockpiling in bulk.

Applications

Virkon® S has a unique formulation, broad spectrum of activity and exceptional safety profile towards man and animals, when used as directed making it the disinfectant choice for: general surface, equipment, vehicle, footdip, water delivery system and aerial disinfection.

Surface Disinfection

The level of disease causing organisms present after basic cleaning can remain high enough to offer a serious disease challenge to livestock. Using a disinfectant proven to be effective against viruses, bacteria, fungi and moulds, such as Virkon® S, is essential.

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.

Mode of Action

Virkon® S oxidizes sulphur bonds in proteins and enzymes disrupting the function of the cell membrane causing rupturing of the cell wall.

There is no evidence to suggest that bacterial disease causing organisms develop resistance towards Virkon® S as opposed to other disinfectant types.

Composition

Virkon® S is meticulously controlled during the manufacture process to be a balanced, stabilized blend of peroxygen compounds, surfactant, organic acids and an inorganic buffer system.

Safety, Health and Environmental Issues

Environmental Profile

Virkon® S is an oxygen based disinfectant chemistry containing simple organic salts and organic acids. The active ingredient in Virkon® S, decomposes by a variety of routes within the environment, in soil and water, breaking down to form the harmless substances, potassium salts and oxygen.

Three-quarters of the ingredients of Virkon® S are inorganic, which decompose in the physical environment to naturally occurring simple inorganic salts. The remaining, organic components, are classified as readily biodegradable according to standard OECD and EU tests.

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/m ²			

Surface area to be disinfected	Total volume of Virkon® S solution	1:100	1:200	1:280 UK DEFRA Diseases of Poultry Orders	1:120 UK DEFRA General Orders
50m ²	15 litres	150g	75g	54g	125g
100m ²	30 litres	300g	150g	107g	250g
500m ²	150 litres	1.5kg	750g	536g	1.25kg
1000m ²	300 litres	3kg	1.5kg	1.071kg	2.5kg
2500m ²	750 litres	7.5kg	3.75kg	2.68kg	6.25kg

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)	Spray all equipment with Virkon® S solution at an application rate of 300ml/m ²

Disinfectant Footdips and Wheeldips

Disinfection Foot & Wheeldips	Dilution Rate	Application
Disinfection Foot & Wheeldips	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. The dilution of the disinfectant solution can be checked for potency at the time of preparation using a Virkon® S dilution test kit.



Water System 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	1:200–1:100 (0.5% - 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 volume of Virkon® S powder, thoroughly stir and leave for 10 minutes. Flush system through to all drain-off points and leave for a further 50 minutes before draining system and refilling with clean water.
Continuous Disinfection	1:1000 (0.1%)	Dose header tank as required or apply through water system dosing equipment.

Virkon® S - Water System Disinfection Usage Chart

Litres of water to be disinfected	Terminal Cleanout		Continuous Water Disinfection
	1:200	1:100	1:1000
100 litres	500g	1kg	100g
250 litres	1.25kg	2.5kg	250g
500 litres	2.5kg	5kg	500g
1000 litres	5kg	10kg	1kg

Aerial Disinfection

To control organisms that can be introduced into a livestock house or farm building during the setting up procedure, and to disinfect the air and other inaccessible areas of the building, use either a fine mist sprayer or thermal fogging machine to apply Virkon® S disinfectant solution evenly.

Aerial Disinfection	Dilution Rate	Application
Misting/Aerial Spray	1:200 (0.5%)	Using either a pressure washer or knapsack sprayer on its finest mist setting and apply at 1 litre of Virkon® S solution per 10m ² of floor space
Cold Fogging	1:100 (1%)	Use a mechanical mister to apply the Virkon® S solution at a rate of 1 litre per 10m ² of floor space
Thermal Fogging	1:25 (4%) solution of Virkon® S in an 85:15 water Virkon® S Fog Enhancer mixture	Using a thermal fogging machine apply the prepared solution at 1 litre per 40m ² of floor space



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Aerial Disinfection Application Usage Chart

Floor space of building	Misting / Aerial Spray 1:200	Cold Fogging 1:100	Thermal Fogging 1:25
50m ²	25g	50g	50g
100m ²	50g	100g	100g
500m ²	250g	500g	500g
1000m ²	500g	1kg	1kg

Aerial Disinfection in the Presence of Livestock

Spraying a fine disinfectant mist or fog in premises, even in the presence of livestock can help reduce cross infection and secondary infection during outbreaks of respiratory and other diseases. Using a mechanical or plumbed in misting system, or a pressure washer to deliver a very fine mist, apply Virkon® S at a dilution rate of 1:200 and at an application rate of 1 litre per 10m² of floor space two to four times daily.

Virkon® S - Selected by the Experts

Selected and recommended by government & NGOs globally for livestock disease control.



Virkon® S is available in the following presentations:

Virkon® S Powder

- Virkon® S 5Kg
- Virkon® S 10Kg
- Virkon® S 50kg

Marketed by:



For further information: ...

- ICI Pakistan Limited, ICI House 5 West Wharf, Karachi Ph: 021-111-100-200
- ICI Pakistan Limited, 63-Mozang Road, Lahore. Ph: 042-111-100-200
- ICI Pakistan Limited, State Life Building, 2nd Floor, Block A, The Mall, Peshawar. Cant. Ph: 091-276476
- ICI Pakistan Limited, Serena Hotel, Club Road, Faisalabad. Ph: 041-619420
- ICI Pakistan Limited, State Life Building, 50 Thandi Sarak, Hyderabad. Ph: 0221-786589
- ICI Pakistan Limited, ICI House 61, 4th Floor Siddique Center Abdali Road, Shajepur Multan. Ph: 061-4781342
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Manufactured by:

DuPont Animal Health Solutions



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