# THERAPEUTIC RESOURCE

# PRESENTS FOR YOUR REVIEW PRODUCT INFORMATION FOR



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# VIRKON PRODUCT REPORT

### Virkon – General Description

Please select one of the links below for moredetailed information.

A unique powder product for the safe and rapid disinfection of surfaces and equipment in a wide variety of situations.

VIRKON is dissolved in water for use, providing a safe working solution with a faint lemon odour.

VIRKON has proven efficacy against bacteria (including mycobacteria), viruses, spores and fungi in a variety of

independent tests using different protocols.

VIRKON presents no serious long term health risks to staff – obviating the need for costly ventilation equipment

and health monitoring.

VIRKON also provides high level disinfection of laboratory equipment and instruments where autoclaving is neither practical nor necessary.

VIRKON is a safe, easy to use product which has a broad spectrum of activity, can be used in a large number of

applications and is environmentally friendly.

### The ultimate high level surface disinfectant.

### Applications

>> Hard surfaces, such as floors, work benches and tops, trolleys, bedframes, sinks and baths.

- >> Laboratory discard jars
- >> Laboratory equipment: automated clinical analysers and centrifuges.
- >> Body fluid spillages: absorbs blood and urine.
- >> Laundry and bedding: soak in VIRKON prior to normal washing.
- >> Air disinfection: cleans air when there is a risk of airborne infections.
- >> Medical devices: decontamination of stainless steel instruments

### Chemistry

VIRKON is a balanced stabilized blend of peroxygen compounds, surfactant, organic acids and an inorganic buffer

system.

### **Mode of Action**

By oxidation of proteins and other components of cell protoplasm, resulting in inhibition of enzyme systems and

loss of cell wall integrity.

### Safety

VIRKON working solution has an exceptional safety profile.

The working solution has a low oral and dermal toxicity, no toxic vapour phase and does not evolve chlorine when prepared, stored and used as directed.

### Compatibility

VIRKON is compatible with a wide range of materials including stainless steel, plastics and rubber. For specific

materials, please consult your distributor or Antec International.

### **Storage and Shelf-life**

Store in cool, humidity controlled conditions. Shelf-life 3 years from date of manufacture. Container must be tightly re-sealed to preserve integrity of powder. VIRKON 1% solutions are stable for 7 days but should be discarded when the pink colour fades.

### Certification

Product is registered in accordance with the requirements of the Medical Devices Directive, (93/42/EEC) as a Medical Device. VIRKON is a registered trademark of Antec International.

### Virkon & Perasafe

VIRKON complements PeraSafe instrument disinfectant/sterilant, for use on medical instruments where autoclaving is neither possible nor practical. PeraSafe is available in 100x16.2gm, 24x81gm, 12x162gm and 6x810gm packs making 100x1,

24x5,12x10 and 6x50 litres of solution respectively.

## Virkon – Applications

 >> Hard surfaces, such as floors, work benches and tops, trolleys, bed frames, sinks and baths.
 >> Laboratory discard jars
 >> Laboratory equipment: automated

clinical analyzers and centrifuges. >> Body fluid spillages: absorbs blood and urine.

>> Laundry and bedding: soak in VIRKON prior to normal washing.>> Air disinfection: cleans air when there is

a risk of airborne infections.

>> Medical devices: decontamination of stainless steel instruments





VIRKON	WATER		
5g	500ml		
50g	5Litres		
500g	50Litres		

### **TO PREPARE SOLUTION**

To prepare a 1% solution. Using the figures in the table, prepare the relevant volume of luke-warm water. Add the appropriate amount of Virkon and stir until the powder has dissolved, leaving a clear pink solution.

Virkon 1% solutions are stable for up to 7 days. Good infection control practice indicates that disinfectant solutions should be discarded daily. Discard VIRKON solution when colour fades.

### **USE OF SOLUTION**

Virkon solutions are used to spray or wipe surfaces or equipment -

>> Spray surface with Virkon solution, leave for up to 10 minutes and wipe over with paper towel.
>> Wipe surface with damp cloth (for large areas, e.g. floors, use a mop) - remove any white deposit left on drying with a paper towel.

### DISINFECTION OF SURFACES AND EQUIPMENT

Hard Surfaces: Floors, work benches and tops, trolleys, bedframes, sinks, baths etc.1. Prepare a 1% solution.2. Spray or wipe surface with Virkon, leave for 10 minutes and dry with paper towel to remove any remaining white deposit.

### **DISCARD JARS**

Fill jar daily with freshly prepared 1% solution having removed discarded items from the previous day.

### LABORATORY EQUIPMENT

To clean and disinfect automated body fluid processing and handling devices eg. Clinical analysers. Flush lines thoroughly with 1% Virkon. Fill lines with 1% Virkon, allow to stand for 10 minutes. Flush lines thoroughly with de-ionised water.

#### **BODY FLUID SPILLAGES**

To clean and disinfect blood and other body fluid spillages on hard surfaces. Cover spillage with Virkon powder.

Leave until the liquid is absorbed. Scrape powder/spillage mixture into receptacle for disposal. Rinse and disinfect

the affected area with 1% VIRKON.

### LAUNDRY

Soak contaminated laundry/clothing in 1% Virkon for ten minutes. Rinse in warm water and wash normally. Colour fastness should be tested by soaking a small area before immersion.

#### **AIR DISINFECTION**

To clean air where there is a risk of airborne infection, use Virkon 0.3% solution in appropriate equipment. All

personnel and sensitive equipment should be removed before application. Contact your distributor or Antec International for further details.

### **MEDICAL DEVICES**

To pre-clean contaminated stainless steel instruments, manually brush with 1% Virkon solution, rinse thoroughly

with tap water and then disinfect.

Please note: higher dilutions (eg: 1:200) will give the same results with extended contact times. Prolonged contact with soft metals such as brass is not recommended. Contact your distributor or Antec International for details.

### **PROTECTIVE CLOTHING, ETC**

None required. Airborne monitoring/ventilation - not required.

### SHELF LIFE

Virkon solutions are stable for approximately 7 days. Replace the solution weekly - if the pink colour is lost before

this time, discard the solution immediately, rinse out the container and replace with fresh solution. Do not replenish or top-up in-use solutions.

### DISPOSAL

Virkon solutions may be disposed of into the water supply.

### STORAGE AND SHELF-LIFE

Store in cool, humidity controlled conditions. Shelf-life 3 years from date of manufacture. Container must be tightly re-sealed to preserve integrity of powder. VIRKON 1% solutions are stable for 7 days but should be discarded when the pink colour fades.

### **BODY FLUID SPILLAGES**

To clean and disinfect blood and other body fluid spillages on hard surfaces. (Virkon may be used on carpeting or other textiles only if an area is tested for colour fastness before use and treated areas vacuumed when dry.)

- 1. Cover spillage with Virkon powder.
- 2. Leave for 3 minutes.
- 3. Scrape powder-spillage mixture into a safe receptacle.
- 4. Wash and disinfect area with 1% Virkon.

# **Virkon – Exceptional Safety Features**

### VIRKON working solution has an exceptional safety profile

The working solution has a low oral and dermal toxicity, no toxic vapour phase and does not evolve chlorine when prepared, stored and used as directed. No exposure limits, no need for protective clothing

### 1 % solution -

- >> Non-irritant to skin
- >> Non-irritant to eyes
- >> Exceptionally low oral toxicity (In addition, Virkon has been proven to have extremely low

environmental impact)

### **Exposure Limits**

No occupational exposure limits are specified for Virkon components according to the requirements laid down in Health and Safety Executive Guidance Note EH 40/1999 under the Control of Substances Hazardous to Health, (COSHH) Regulations, 1994.

### Non-irritant to skin

Skin irritation and corrosivity study in the rabbit No adverse skin reactions were noted during the period. A primary irritation index of 0 was obtained. VIRKON (1.0% w/v) was regarded as non-irritant to the skin of the rabbit. No corrosive effects were noted.

### Irritancy

At 1% in use dilution Virkon is classified as: - Non-irritant to skin - Non-irritant to eyes - when tested according to EEC Directive 67/548/EEC.

### Non-irritant to eye

Virkon (1.0% w/v): Eye irritation study in the rabbit The eye irritation scores were interpreted by a modified Kay and Calandra scoring system and the test article was classed as non-irritant.

### Acute oral toxicity study in rat

Solutions were given by intragastric intubation at a constant concentration of 500mg/ml in accordance with EEC Directive 67/548/EEC. The LD50 of Virkon was calculated to be 4,123mg/kg body weight. In line with EEC Directive 67/548/EEC, Virkon is classified as "non harmful".

## **Environmentally safe**

The impact of any chemical system on the environment is measured by evaluating eco-toxicity and biodegradability.

Using both approaches, Virkon is shown to have remarkably low environmental impact –

### **Eco-toxicity**

- >> Effect on the performance of Sewage Treatment Facilities
- >> Soil toxicity test using the earthworm, Eisenia foetida
- >> Freshwater toxicity using Daphnia magna (water flea) as the test organism

#### **Biodegradability**

- >> Compliance with EEC Directives
- >> Biological Oxygen Demand (BOD)

Summaries of the eco-toxicity and biodegradability work are given below:

### A. Eco-toxicity

### **1.Effect on the performance of Sewage Treatment Facilities**

#### Summary

Antec Virkon was the least toxic to anaerobic sludge and should not pose a threat to Sewage Treatment Facilities. This confirmed earlier independent work performed by Anglian Water.

### **Materials and Methods**

This was performed using standard OECD protocols. Assessment of the toxicity of the disinfectants to the anaerobic gas production from sewage sludge was carried out as detailed in the Methods for the Examination of Waters and Associated Materials 1986 (HMSO 1987). Primary digesting sludge (obtained from Wargrave, Sewage treatment works, Henley, Oxon) was incubated alone (control) and simultaneously with a range of concentrations of test material in sealed bottles for 3 days at 35oC. The increase in headspace volume resulting from the production of carbon dioxide and methane was measured, and the amount of gas calculated by means of a calibration graph. The inhibition of gas production by the test material was calculated from the volumes produced in the test and control bottles and is expressed as percentage inhibition, calculated as follows:

% inhibition =  $(1 - At/Ac) \times 100$ 

(At = volume (ml) of gas produced in test vessels)

(Ac = volume (ml) of gas produced in control vessels)

Each disinfectant was applied to digested sludge to give the following concentrations: 0.2, 0.5, 1.0, 2.5 and 5.0 g/l. Each test was carried out in triplicate. The EC50 value was calculated from a plot of percentage inhibition against the log concentration of the test chemical.

### Results

Antec Virkon demonstrated an EC50 of 920 (+/- 19) mg l-1, which is 20% better than the value of 770 (+/- 28) mg l-1 for peracetic acid.

### Interpretation

This is the equivalent of 1 litre of 1% Virkon solution in just 10.87 litres of water.

At this level would not be a major problem for sewage system. However, as an extreme the European Union states that an environmentally safe, or 'predicted no effects concentration', is 1% of the EC50 value. Thus, the theoretical predicted no effects level for 1 litre of 1% Virkon solution would be 1087 litres, as against 1299 litres for peracetic acid.

This finding is entirely consistent with findings by Anglian Water. In a 5 day Biochemical Oxygen Demand test a 1% solution of Virkon subsequently diluted to a level typically found in effluent streams did not inhibit the BOD test. From this it can be concluded that Virkon was degradable under the conditions of test and as such would not affect the functioning of sewage treatment plants. Anglian Water stated;

"In the dilution normally encountered all of the (Virkon) ingredients are either decomposed and/or biodegraded and are comparatively harmless. The triple salt of potassium monopersulphate will decompose into harmless by-products. In the aqueous environment the product will eventually degrade and should pose no problems to sewage treatment processes."

### 2. Soil toxicity test using the earthworm, Eisenia foetida

### Summary

Antec Virkon shows low toxicity to earthworms and can be described as being 'non-toxic' according to EU guidelines

### **Materials and Methods**

Acute tests using Eisenia foetida were carried out according to OECD method 207 'Earthworm Acute Toxicity Tests' (OECD 1984b). In summary the protocol involves exposing earthworms to the test substance through contact with treated filter paper in order to determine the LC50 i.e. the interpolated concentration which would result in a mortality of 50% of an exposed population within the test period (48 hours). Test organisms were obtained from a commercial supplier, Original Organics.

In the definitive tests exposure concentrations for Antec Virkon and peracetic acid were;

### 0, 3,6,12,24,48 mg cm-2

Cleaned depurated worms of standard size and age were placed in sealed, ventilated glass tubes lined with filter paper to which 1 ml of test solution (made from deionised water) had been applied. Ten worms, each held individually, were exposed per treatment. They were held in the dark at 20 +/- 20C for 48 hours after which the number of dead worms was used to calculate the LC50, calculated by Probit analysis.

### Results

Antec Virkon demonstrated an LC50 of 1872 mg kg-1, which is 53% better than the value of 1224 mg kg-1 for peracetic acid.

### Interpretation

Both Antec Virkon and peracetic acid can be interpreted as being 'non-toxic' according to EU standards.

The LC50 is equivalent to adding 1 kg of Antec Virkon to just 5.34 kg of soil. However, as an extreme the European Union states that an environmentally safe, or 'predicted no effects concentration', is 1% of the lC50 value. Thus, the theoretical predicted no effects level for 100l of 1% Virkon solution would 534 kg of soil.

# **3.** Freshwater toxicity using Daphnia magna (water flea) as the test organism

### **Summary**

The effect on aquatic life is likely to be an issue of concern. The Environment Agency (formerly National Rivers Authority) may expect data to be provided in respect of aquatic organisms for a disinfectant. The data below should be acceptable to the Environment Agency.

### **Materials and Methods**

Acute tests using Daphnia magna were carried out according to OECD method 202 part I 'Daphnia sp. Acute Immobolisation Test' (OECD 1984a). In summary the protocol involves exposing waterfleas to the test substance in solution in order to determine an EC50 i.e. the interpolated concentration which would result in loss of mobility of 50% of an exposed population within the test period (48 hours).

The tests were carried out according to WRc's standard operating procedure (WRc 1991). Test organisms were obtained from WRc's long term culturing facility. In the definitive tests concentrations used were as follows;

0,1,2.2,4.6,6.0,10 mg -l

Juvenile (<24 hours old) Daphnia were used in each case, with exposure in groups of 5 and each test concentration duplicated (i.e. 10 individuals per exposure). All tests were conducted using clean groundwater at 22+/- 2oC to make up test dilutions. Numbers of immobile Daphnia i.e. those which were dead or 'functionally dead' were recorded after 2, 24 and 48 hours exposure, and the 48 hour EC50 was calculated by Probit analysis.

### Results

All water control quality values (pH, dissolved oxygen, temperature and hardness) were within acceptable test boundaries in the definitive Daphnia tests, and control immobilisation was 0% in every case.

Antec Virkon demonstrated an EC50 of 6.5 mg l-1, against 5.9 (95% Confidence Interval 5.3-6,5) mg l-1 for peracetic acid.

### Interpretation

Classification of products according to acute toxicity are designed to be relative rather than absolute. According to the EU Directive 67/548/EEC (Dangerous Substances Directive) Antec Virkon is classified as toxic, though using the same system a standard Quaternary Ammonium compound, would be classified as very toxic. Indeed the latter has an EC50 of less than 1 mg l-1 making it at least more than 6.5 times more toxic.

### **B. Biodegradation**

Virkon consists mainly of inorganic salts which decompose into harmless byproducts. The surfactant is a salt of straight chain alkyl benzene sulphonate complying with EU directive 82/243 giving more than 90% biodegradability under OECD test conditions.

For completeness of presentation the data from Anglian Water is presented again. In a 5 day Biochemical Oxygen Demand test a 1% solution of Virkon subsequently diluted to a level typically found in effluent streams did not inhibit the BOD test. From this it can be concluded that Virkon was degradable under the conditions of test and as such would not affect the functioning of sewage treatment plants. Anglian Water stated;

"In the dilution normally encountered all of the (Virkon) ingredients are either decomposed and/or biodegraded and are comparatively harmless. The triple salt of potassium monopersulphate will decompose into harmless by-products. In the

aqueous environment the product will eventually degrade and should pose no problems to sewage treatment processes."

# Virkon – Chemistry

### Sophisticated powder peroxide system

Virkon's unique, patented formulation is based on a multi-component oxidising system in which a range of compatible biocides simultaneously attack the major physical and chemical components of pathogens, in this case a typical virus –



- giving Virkon the widest proven spectrum of activity of any disinfectant available.

### How was this approach developed?

Antec's wealth of experience in disinfectant infection control indicated that an oxidising system would best be able to combine efficacy and safety. The oxidising agent chosen was the triple salt of potassium monopersulphate, which works best at low pH (i.e. under acid rather than alkaline conditions). Accordingly, two organic acids (malic and sulphamic acid) were added to produce the low pH. An inorganic

buffer (sodium hexameta phosphate) was incorporated to stabilise these acid conditions. To combine cleaning and disinfection (and avoid the problems of precleaning associated with "traditional" disinfectants), a surfactant (sodium dodecyl benzene sulphonate) was added.

### The full formulation is -

- >> Triple salt of potassium monopersulphate Oxidising agent
- >> Sulphamic acid Organic acid/catalyst
- >> Malic acid Organic acid/catalyst
- >> Sodium hexametaphosphate Buffering agent
- >> Sodium dodecyl benzene sulphonate Surfactant
- >> Sodium chloride

>> Amaranth colour & Lemon peel perfumeThree further components, not discussed above, are in VIRKON:

A) Salt (sodium chloride). This is an inherent part of the complex chemical pathway of VIRKON's action.

B) A pink dye (amaranth colour, EEC No. 123). In addition to being aesthetically pleasing, this serves a very practical purpose, - it indicates whether the VIRKON solution is active. In its oxidised form, it is pink but when the solution starts to lose its activity it reverts to its colourless reduced form. VIRKON solutions must always be replaced if the colour starts to fade.

C) Lemon peel perfume which gives the powder its characteristic odour. Note that

the liquid is odourless to most people.

In addition to the individual components combining to give this multi-component oxidising system unequalled spectrum, all of the individual components were chosen with user and environmental safety profiles as a priority.

Patented worldwide, Virkon is therefore unique in combining the efficacy and spectrum of the most potent disinfectants with the safety profile required by modern standards.

# Virkon – Compatibility

VIRKON is compatible with a wide range of materials including stainless steel, plastics and rubber.

The standard UK test uses the stringent BCPC protocol -

Corrosivity trials were performed according to the British Crop Protection council Testing Scheme using a 2% Virkon solution with 48 hours immersion at 21 degrees Celsius with 24 hours air drying and no rinsing. Typical applications consists of a 1% solution ratio.

#### **Results**

Test Material		Sample weight (g)		Visual assessments and remarks
	Before	After	Change	
Aluninum	11.028	11.031	0.00	
Brass	8.128	8.102	-0.30	Affected
Mild Steel	8.586	8.501	-1.00	Rust
<b>Galvanised Steel</b>	1.712	1.501	-12.30	Affected
Monel Metal	6.570	6.570	0.00	
Polypropolyene	12.572	12.577	0.00	
Acetal Resin	37.160	37.120	-0.10	
Nylon MNF	4.411	4.415	0.10	
12115				
PTFEE	0.999	1.001	0.20	
Polyethylene	0.680	0.684	0.60	
HD				
Polyethylene	1.924	1.931	0.40	
LD				
EVA	7.656	7.661	0.10	
UPVC	13.072	13.042	-0.20	
PVC	13.072	13.042	-0.20	
EPDM	1.824	1.817	-0.40	
ABS	4.361	4.363	0.00	
GRP	6.159	6.159	0.00	
Polycarbonate	4.859	4.859	0.10	
Polyurethane	10.057	10.079	0.20	
"Viton"	3.468	3.458	0.00	
"Hytrel"	2.604	2.605	0.00	
NBR Nitrile	1.899	1.899	0.00	
CR Neoprene	4.077	4.063	-0.30	
"Buna N"	4.777	4.777	0.00	
Silicone	7.926	7.936	0.10	
Red Fibre	3.070	3.116	1.50	

Conclusion - Virkon, used as directed, is non-corrosive.

#### VIRKON BEATS MRSA

Virkon, the tried, tested and proven high level disinfectant, now available in handy tablet form is the answer to the elimination of super-bug bacteria, such as MRSA, from the clinical environment.

Virkon has been tested by leading UK laboratories and is proven effective against drug-resistant (and non-resistant) staphylococcus aureus, as well as environmentally transmitted viruses such as Noroviruses and blood borne viruses, such as Hepatitis A, B, C and HIV.

Non-chlorine based Virkon, with an exceptional safety profile, has no noxious vapour to cause irritation to eyes and respiratory tract. Unlike hypochlorite (bleach), Virkon is not deactivated by organic matter and is therefore ideal for disinfection of body fluid spills, including urine. Virkon in powder form absorbs the spill, without the generation of chlorine, as is the case with NaDCC/hypochlorite granules.

Virkon has all the attributes of a disinfectant for use in a healthcare environment in close proximity to patients. Benefits include user and environmental safety - no fumes or vapour, broad spectrum high level efficacy, environmentally sound, through biodegradability and good materials compatibility.

The various Virkon presentations allow easy and accurate preparation of a single dilution for all applications, in the most economical and convenient way. Virkon is available in 5 kilo powder drums for large scale use, 500gm shaker packs for direct application to body fluids, 50 gm sachets for unit dose preparation of 5 litre volumes or 5gm tablets for small volume applications. Virkon in all forms is dissolved in tap water to form a solution effective up to 5 days or as indicated by the colour of the solution, which fades when nearing its use-life limit. Established and proven, Virkon still has all the answers.

### SARS (SEVERE ACUTE RESPIRATORY SYNDROME) DECONTAMINATION AND PREVENTION PROTOCOLS

Whilst the routes of transmission of SARS are not yet fully understood, there is increasing evidence of an environmental dimension.

Decontamination of environments such as hospital rooms, clinics, private dwellings and public places (schools, etc) in which known cases have occupied is an obvious application for Virkon. In addition, Health authorities in Hong Kong and UK have also added a preventative aspect to environmental hygiene.

There follows a summary of the advice given on the various websites to both Healthcare professionals and the public. Allied to this are the directions for the utilisation of Virkon to this advice.

The current consensus is that virus contained in aerosols or droplets is excreted from an infected person in coughs, sneezes or vomitus. It is thought that the virus is inhaled, or, if the virus has contaminated a surface, then transmission is via another person touching that surface and transferring the virus from hand to mouth or airway. The protocols seek to minimise the opportunity for transmission via the environmental surfaces and must therefore be performed on a regular basis for prevention to be effective.

### HOSPITALS

#### **Inpatient Setting**

For care of suspect or confirmed cases, e.g. side room or A&E Department. "Surfaces should be cleaned with broad spectrum disinfectants of proven viral activity" – WHO 28 March 2003

All surfaces should be treated with 1% Virkon via a spray application for equipment and smaller surface areas and through a cloth or mop soaked in solution for large surface areas. Solution should be allowed to remain wet/damp for 10 minutes and then wiped dry.

Body fluid spills – absorb vomitus with Virkon powder until a damp slurry is achieved. This can then be scraped into clinical waste bags via paper towels, etc. Rinse the area of the spill with 1% Virkon solution, allow to

stand for 10 minutes and then wipe dry.

Laundry – disinfect laundry in 1% Virkon solution for 10 minutes before washing in normal manner on highest recommended temperature for the fabric. Check colour fastures of fabric prior to soaking.

### **COMMUNITY SETTINGS**

Medical facilities, e.g. GP surgery and Primary Care, Ambulances, etc.

"Environmental surfaces ... contaminated – disinfect" ... PHLS UK 1.4.03 Body fluid spillages – as above for Hospitals.

Surfaces – as per patient areas in Hospitals – spray/wipe 1% Virkon solution

### PUBLIC PLACES

Recommendations from Hong Kong Department of Health: Cinemas, restaurants, schools, etc.

Cleanse and disinfect facilities (furniture and toilet facilities) regularly (at least once a day) using 1% Virkon solution.

If facilities are contaminated with vomitus, soak up liquid with Virkon powder, scrape up into clinical waste disposal containers (yellow bags). Rinse the affected area with 1% Virkon solution, leave in contact for 10 minutes and wipe dry with paper towels and dispose.

Wash/wipe vehicle compartments with 1% Virkon solution regularly (at least once/day).

If vehicle passenger compartments are contaminated with vomitus, treat as per the above.

### **HOME & OFFICE SETTINGS**

Office furniture, equipment and lifts should be cleaned using 0.5% Virkon solution – (5 gms/1 litre water in spray bottle). Wipe dry after 10 minutes contact.

Toys, furniture, should be disinfected regularly (at least once/day) with 1% Virkon in a spray bottle (10gms/1 litre water). Wipe dry after 10 minutes contact.

Clothes – soak in 1% Virkon after contact with SARS patient, e.g. hospital visit.

Household surfaces (e.g. counter on table tops, door knobs, bathroom fixtures) should be decontaminated if known to be affected by body fluids from an infected person or on a regular (once per day) basis as a preventative measure (body fluids such as sweat, mucous, vomit, blood or urine).

Laundry – disinfect laundry in 1% Virkon solution for 10 minutes before washing in normal manner on highest recommended temperature for the fabric. Check colour fastures of fabric prior to soaking.

### **For Further Information Contact:**

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