

Materials Compatibility Review

Virkon™ S broad spectrum disinfectant solutions can be applied to surfaces, equipment, tack, vehicles, water delivery systems, boot dips, farm buildings, stables etc.

Whilst the efficacy of Virkon™ S disinfectant solutions is first and foremost, questions are sometimes asked about the physical effects, if any, on common construction materials used in the application environments.

Compatibility Review Test Method Protocol

A materials compatibility review was conducted to determine if, when applied as a spray application at 1:100 and 1:500 dilution rates, Virkon™ S disinfectant solutions would have any detrimental effect to specific construction materials. The materials tested included; various metals, plastics, rubber, and silicone.

The test method employed consisted of spraying each sample material twice with a specified in-use dilution rate of Virkon™ S disinfectant solution, then leaving it to dry by air.

The disinfectant spray application was then repeated on each test sample for a total of 10 cycles. Once the test sequence was complete, each sample was closely inspected by our laboratory technicians to determine if any detrimental structural effects had been caused by the repeated application of Virkon™ S disinfectant solution.

Material	Dilution Rate	
	1:100	1:500
Aluminium	✓	✓
Brass	✓	✓
Galvanised Steel	✓	✓
Copper	✓ *	✓ *
Mild Steel	✗	✓ **
High Density Polyethylene (HDPE)	✓	✓
Polypropylene (PP)	✓	✓
Acrylonitrile Butadiene Styrene (ABS)	✓	✓
Polycarbonate (PC)	✓	✓
Perspex	✓	✓
Polyvinyl Chloride (PVC)	✓	✓
Poly Lactic Acid (PLA)	✓	✓
Low Density Polyethylene (LDPE)	✓	✓
Nitrile Butadiene Rubber (NBR)	✓	✓
Viton™ Rubber	✓	✓
Silicone	✓	✓
Leather Upholstery	✓	✓
Fabrics and Woven Materials	n/a	✓
Laminate Flooring	✓	✓

* loss of shine.

** test material with a small amount of disinfectant solution to ensure compatibility.

NB. Should you have any specific materials compatibility questions, contact LANXESS

Summary Conclusion

Virkon™ S disinfectant solutions are compatible with aluminium, brass and galvanised steel at each of the in-use dilution rates, and on conclusion of the test cycle protocol. With regard to copper, no detrimental structural effects were observed but there was a loss of surface shine, impacting its cosmetic lustre.

With regard to mild steel, we advise caution when using Virkon™ S disinfectant solutions, as on inspection varying degrees of corrosion were observed to its physical structure, at each of the specified test in-use dilution rates. The results of the spray application tests to the sample plastics, rubber, and silicone clearly indicated that there was no loss of structural integrity or loss of visual appearance.



The table details the results of each sample material tested, at specified in-use dilution rates, for a total of 10 cycles, after visual inspection.

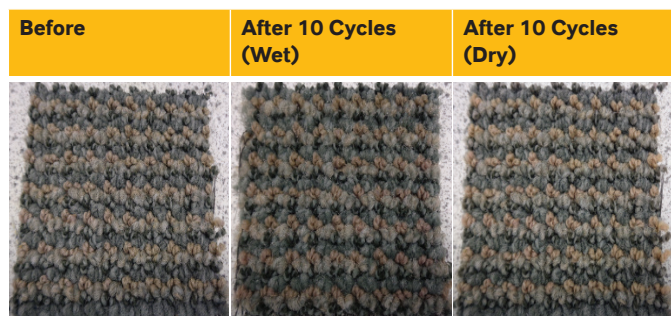
Carpets and Soft Furnishings

Due to the extensive portfolio and variability in the construction materials used to manufacture carpets, laminate flooring, soft furnishings and leather upholstery, we always stress the high importance of caution when applying Virkon™ S disinfectant solutions.

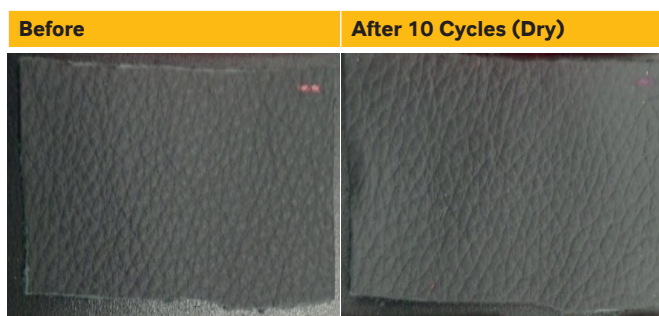
The nature of any chemistry can sometimes cause degradation or discoloration to fabrics and woven materials.

Therefore, we advise that Virkon™ S disinfectant solutions are always used at an in-use dilution rate of 1:500 on carpets and soft furnishings, and 1:100 on laminate flooring and leather upholstery. We also advise that the material to be disinfected must always be tested first, in an inconspicuous place, to ensure no detrimental effect.

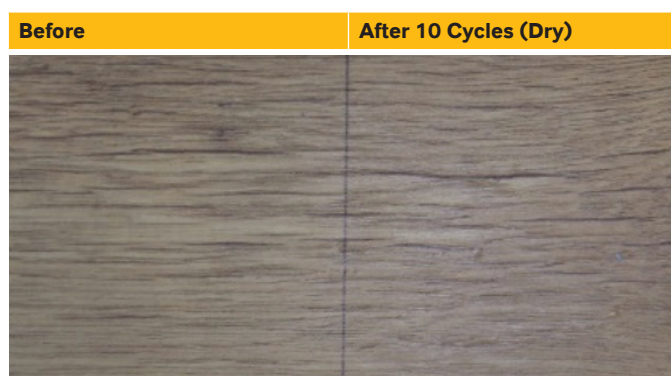
Virkon™ S 1:500 carpet compatibility study



Virkon™ S 1:100 Leather study



Virkon™ S 1:100 Laminate Flooring study



Virkon™ S Presentations



Where materials compatibility or disinfectant residue may be of concern, we recommend wiping clean with a damp cloth (after 10 minutes).

Please consult the Virkon™ S product container label for a comprehensive list of organisms and directions for use.

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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.



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