Transport Fabrics Anti-microbial Solutions.

For the new world order in sanitation and hygiene.

Coronavirus has caused global turmoil and placed new emphasis on issues of hygiene and sanitation. While it's impossible to apply social distancing to the seats we sit on when we travel, what we can do is make our transit and motorcoach upholstery as safe and as easy to clean as possible when it comes to infection control.

Our upholstery solutions provide anti-microbial and bleach cleanable options across wool and vinyl products, helping control bacterial infection and providing easier cleaning in the new era of public health hygiene.

Our collection of performance vinyls is available from stock, while our Defender treatment is available on request and brings anti-microbial protection to plush wool fabrics.

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What do we know so far?

Research is pointing to the spread of the virus taking place more easily from hard rather than soft surfaces – better news for fabrics, take care with those grab handles, plastic seat trays and hard plastic seats.

A Harvard University report says that "available evidence suggests **Coronavirus can be transmitted** less easily from soft surfaces than frequently-touched hard surfaces, such as a doorknob or elevator button". This is supported by earlier work conducted by the US **National Center for Biotechnology** Information which found that flu viruses "survived for 24-48 hours" on hard, nonporous surfaces such as stainless steel and plastic, but survived for less than 8-12 hours on cloth, paper, and tissues".

Wool fabrics and **Defender anti**microbial treatment.

Our plush wool fabrics percentage of nature's

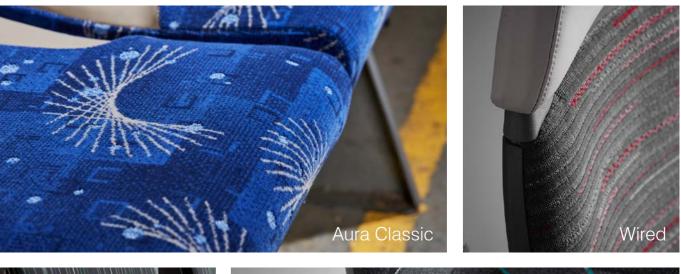
are made from a high most intelligent fiber type, pure new wool. Wool is safe (naturally flame-retardant), healthy (breathable, air purifying, acoustic) and durable, with long-lasting appearance retention and a level of natural resistance to soiling. Its multiple smart abilities are further enhanced through the addition of Defender, a powerful triple action post-treatment specially formulated for use with plush wool fabrics.

Defender treatment is:



The anti-microbial element is based on low concentration silver technologies, with no human toxicity, protecting against bacteria such as Staphylococcus aureus, MRSA, Salmonella Enteritidis and Salmonella Typhimurium.

Defender treatment can be applied to the following wool fabrics:





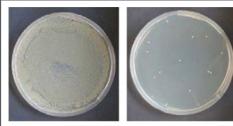




Defender allows liquid spills to bead up on the fabric's surface rather than soak in.

Defender inhibits the growth of bacteria and fungus which thrive in warm conditions common to many transport interiors.





Non Defender treated Defender treated

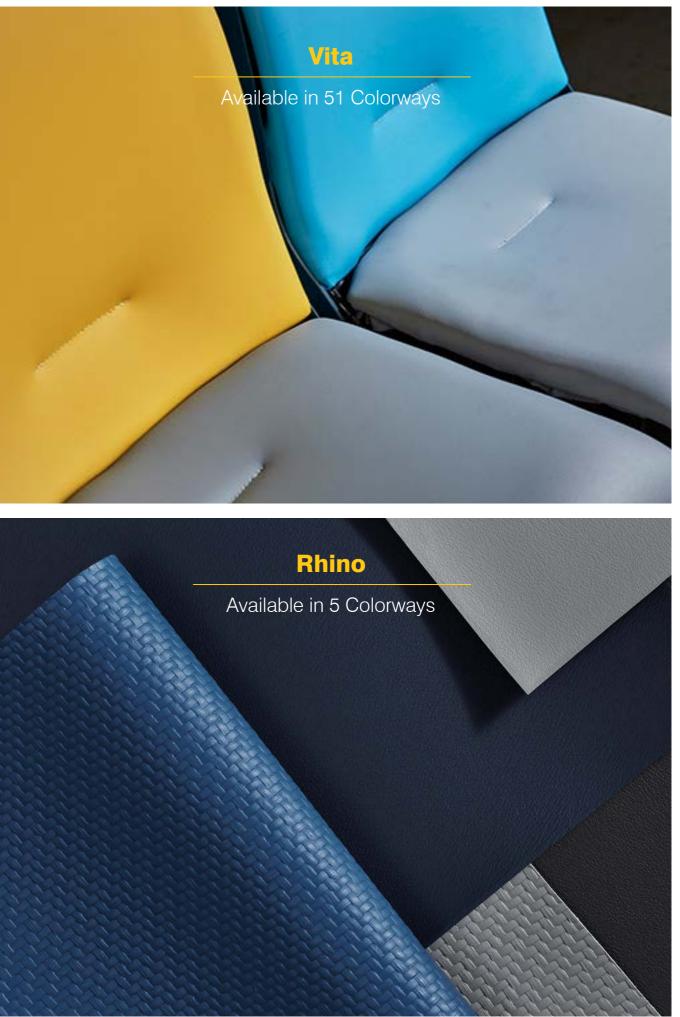




High performance bleach cleanable vinyls.

For the ultimate easy clean upholstery solution, we have a number of performance vinyls which can be used as standalone finishes to trim the entire bus or coach seat, or provide great accent touches for headrests, side panels or seat pads. Rhino, Vita and Manila benefit from a robust protective finish which allows full bleach cleanability, meaning any germs will be killed immediately in a quick wipe down cleaning action. Vita and Manila also have an added antimicrobial treatment which protects against bacterial infection such as MRSA, Salmonella and E.coli.





Technical Information

Wool

Composition High content wool blend with 100% cotton or polyester blend backing

Width 59 inches minimum

Abrasion Resistance ≥80,000 Martindale cycles (BS EN ISO 12947)

Flammability

FMVSS 302 ECE Reg 118 Part 2 BS 5852 Ignition Source 7 FR performance is dependent on the FR treatment applied

Light Fastness 6 (ISO 105 - B02)

Fastness to crocking Wet: 4; Dry: 4 (ISO 105 X12)







Technical Information

Vinyl - Vita/Manila

Composition

PVC with 100% cotton backing

Width 54 inches minimum

Abrasion Resistance

BS EN ISO 5470-Method 1, Wool Abradant (Grade 2 minimum) \geq 100,000 Martindale cycles ISO 7854, Method B 400,000 flexing cycles

Flammability

FMVSS 302 ECE Regulation No.118 Part 2/Part 3 FAR/JAR25.853 BS 5852 Ignition Source 7 with interliner FR performance is dependent on the components used

Light Fastness

AATCC-16 (40 hours) Class 4

Fastness to crocking Wet: 3/4; Dry: 4 (AATCC-8)







Vinyl - Rhino

Composition PVC with 100% polyester backing

Width 54 inches minimum

Abrasion Resistance ASTM D4157 / ACT Coated 50K Wyzenbeek method \geq 50,000 double rubs CFFA 1a Cotton Duck Wyzenbeek method \geq 250,000 double rubs

Flammability

FMVSS 302 NFPA 130 DOCKET 90 FR performance is dependent on the components used

Fastness to crocking

Wet: 4; Dry: 4 (AATCC 8)

QUV

650 hours (CFFA-2-C1)









These are the most frequently asked questions we're being asked right now about our products. And of course, we're happy to provide the answers:

effective against Coronavirus?

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Anti-microbial treatments protect against a wide range of bacteria which cause infection - such as MRSA, Salmonella and E.coli - and so can provide added hygiene benefits in busy public transport applications. They have not yet been tested against Covid-19, but we would hope to establish their effectiveness when testing laboratories are in a position to do so. The claims of some fabric companies may be misleading, as they have tested against a feline strain of Coronavirus, which is not the same as the human strain which causes Covid-19.

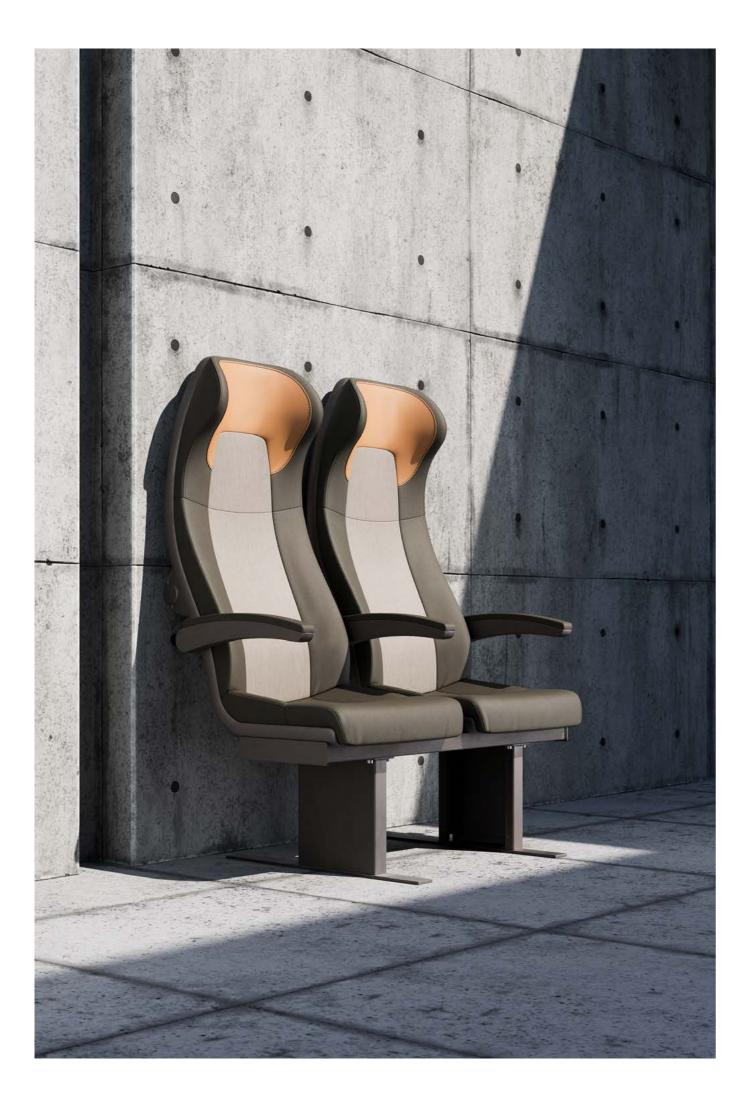
What cleaning recommendations would you advise now that everyone is more concerned with hygiene?

Vinyl upholstery can be cleaned with alcohol cleaners or bleach, using a 10% bleach chlorine solution. Defender treated fabrics are not only anti-microbial, but are also equipped with anti-stain protection which provides an extra barrier against liquid spills and dry soiling. The same basic principles of upholstery care and maintenance continue to apply now there is even more emphasis on sanitation: weekly industrial vacuuming to remove dust, dirt, grit and food debris; bi-annual professional cleaning of wool upholstery and application of steam to restore the upholstery pile to its original upright alignment; attending to stains as soon as possible, using branded upholstery shampoo and testing first on an inconspicuous part of the fabric.

I have seen photos of tube trains in London being doused in anti-viral spray. Is this to disinfect the fabrics?

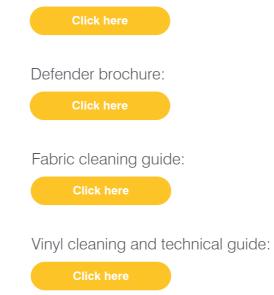
No, Transport for London have confirmed that the anti-viral spray has actually been used as a precautionary measure on the hard surfaces of the carriage, especially which people have touched, or might have sneezed or coughed on. This includes the grab handles, support rails, doors and floors.

Are any of these products or treatments



Additional Resources

Product catalogue – designs, colours and technical specifications for all stock-backed products:



www.camirafabrics.com