SupaSpun KilBac®

Anti-microbial Depth Cartridge

Made with Sustainable Polypropylene

In many water-based processes there can be a persistent problem with microbial contamination and the subsequent biofouling of the filtration system. This could be on either depth or membrane based filters. SupaSpun KilBac® is a range of absolute rated melt blown depth filters with the addition of KilBac® anti-microbial and anti-algal technology to prevent biofouling on the filtration media.

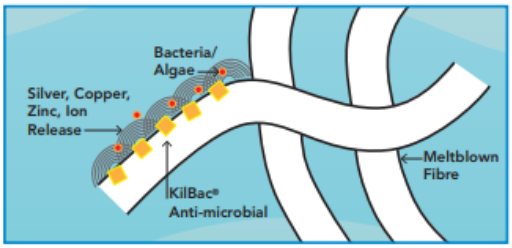
The Technology

Rather than being based on nano sized particles whose size and safety have been questioned in the past, our technology utilises micron sized zeolite structures which are used as a carrier for the anti-microbial agent. By optimising the fibre diameter to the active particle size we maximise the surface area and hence the efficacy of the anti-microbial to the fluid stream being filtered.

Two KilBac® grades are available;

- Silver (Ag) / Zinc (Zn) for bacteria control.
- Silver (Ag) / Copper (Cu) for algae control.

KilBac® fibres are blown continuously on to a central support core, with fibre diameters controlled to produce different pore sizes throughout the extrusion process. All the layers are interlinked to offer maximum support while ensuring that the high voids volume is maintained, but with increasing fibre density towards the cartridge central core therefore resulting in true graded density depth filtration.



- Silver (Ag) / Copper (Cu)
- Silver (Ag) / Zinc (Zn)

Features and Benefits

- Absolute removal ratings for consistent and reliable performance
- Graded density structure for maximum dirt-holding capacity
- Anti-microbial and anti-algal technology
- Eliminates biofouling on filters in addition to controlling overall bioburden in water-based recirculation processes
- Prevents biofilm build-up on single pass systems, extending filter life and reducing overall operating costs
- Absolute ratings of 1 to 20µm (Beta Ratio 5000)
- Thermal bonding process minimises media migration and ensures minimal extractables
- Identification data embossed on every cartridge
- Advantage grade featuring moulded end caps and rigid outer support cage

Industries and Applications

Building Services
Oil and Gas
Industrial Process
Fuels
Waste Water Treatment
Water Treatment
Food & Beverage

- Sidestream filtration for cold and hot water loops, pre-RO protection
- Extending life and protecting seawater filtration systems e.g. SRP membranes
- Any application involving processing water e.g. water-based cutting fluids
- Protection from biofouling on fuel systems using biofuels
- Maximising lifetime of membrane separation systems
- Desalination, pure water bioburden reduction
- Prevention of biofilm on filters used to protect membranes in process water systems

AMAZON

SupaSpun KilBac® Technical Data

Dimensions

PP

Outside Diameter: 64mm
Core Diameter: 28mm

Sterilisation and Sanitisation*1

Steam: 121°C for 240 Cycles of 60 mins each
135°C for 8 Cycles of 30 mins each
Hot Water: 90°C for 30 mins (0.2 bar Δp max)

**1 Applies to single open end cartridges only. For all steaming and hot water applications, the Reinforced Polypropylene End Cap option must be used (PP Only)*

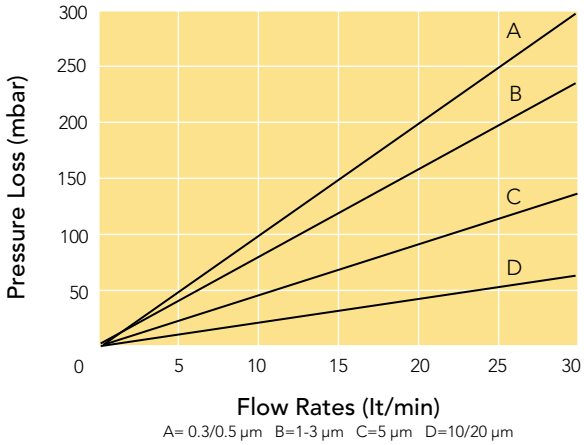
Maximum Operating Conditions

Temperature 80°C

Recommended change-out differential pressure: 2.5 Bar

Maximum ΔP	PP Media PP Core	PP Media Reinforced PP Core	PP Media St. St Core
@ 20°C	4.0	4.0	4.0
@ 50°C	1.5	4.0	4.0
@ 80°C	0.25	2.4	4.0
@ 100°C	-	1.5	4.0

Flow Rates for Water (10" Element)



A= 0.3/0.5 µm B=1-3 µm C=5 µm D=10/20 µm

Antimicrobial Performance

Tested to ASTM E-2149 and ASTM G-29 and effective against the following organisms:

- S. aureus
- P. aeruginosa
- E.coli
- Microalgae Chlorella sp

Please contact us to discuss effectiveness against other microbial strains.

Food Contact

All materials of construction, including the antimicrobial / algal additives, are compliant with CFR21 176.170.

Ordering Guide

04A	P	005 -	20	N	N	A	G
Media	Core/Assembly	Micron Rating	Length (mm)	End Caps	Seal	Branding	Options
A - Anti-algae PP B - Anti-bacteria PP	**Standard** P - Polypropylene D - Reinforced Polypropylene S - Stainless Steel **Advantage** W - Outer Cage + Moulded Ends Y - Outer Cage + Reinforced Polypropylene Core + Moulded Ends	001 - 1.0 002 - 2.0 003 - 3.0 005 - 5.0 010 - 10.0 020 - 20.0	05 - 125 09 - 251 10 - 254 13 - 332 20 - 508 30 - 762 40 - 1016 60 - 1524	N - None A - Code A B - Code B*2 D - Code D S - Code S 2 - Code 2 3 - Code 3 7 - Code 7 8 - Code 8 0 - Code 0	N - None B - Buna E - EPDM F - FEP / Silicone P - PE Gasket*3 S - Silicone V - Viton	A - Amazon	G - Reinforced Polypropylene End Cap

Example: 04AP005-20NNA = Anti-algae Polypropylene media and core, 5µm rating, double length 508mm (20") long, double open ended connections, no seal.
*2 Code B - to fit Amazon 50 Series housings only. *3 PE Gasket – End Cap option N only

Made with Sustainable Polypropylene

This product is made from a sustainable source of polypropylene.

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