

SUPAGARD KilBac®

Anti-microbial Depth Cartridge



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.

SupaGard KilBac® is a range of nominal rated melt blown depth filters with the addition of KilBac® anti-microbial and anti-algal technology to prevent biofouling on the filtration media.

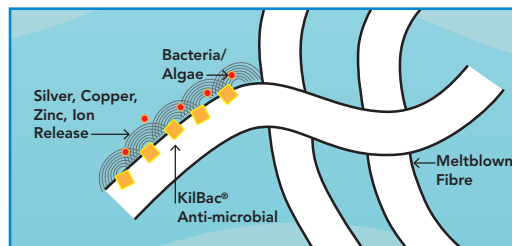
The Technology

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

- 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
- Range of Nominal ratings from 0.5 to 20µm
- 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
- B-Blue large diameter cartridges available in all grades

Industries and Applications

- | | |
|------------------------------|---|
| Building Services | • Sidestream filtration for cold and hot water loops, pre-RO protection |
| Oil and Gas | • Extending life and protecting seawater filtration systems e.g. SRP membranes |
| Industrial Process | • Any application involving processing water e.g. water based cutting fluids |
| Fuels | • Protection from biofouling on fuel systems using biofuels |
| Waste Water Treatment | • Maximising lifetime of membrane separation systems |
| Water Treatment | • Desalination, pure water bioburden reduction |
| Food & Beverage | • Prevention of biofilm on filters used to protect membranes in process water systems |

AMAZON

SupaGard KilBac® Technical Data

Dimensions PP
 Outside Diameter: 64mm
 Core Diameter: 28mm

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 |

Antimicrobial Performance

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

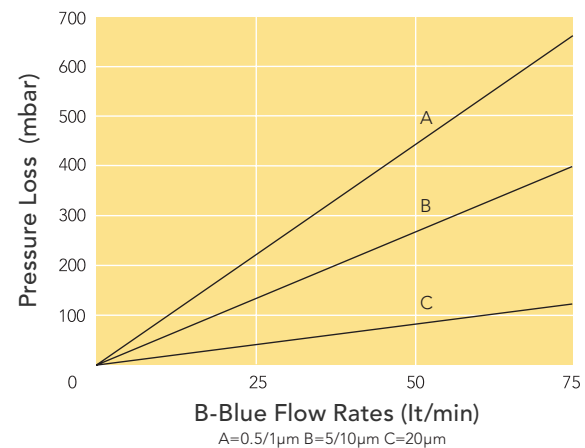
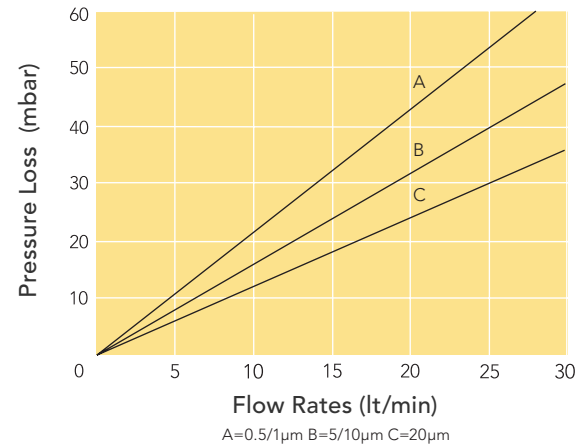
- *S. aureuso*
- *P. aeruginosa*
- *E.coli*
- *Microalgae Chorella sp*

Please contact us to discuss effectiveness against other microbial strains.

Food Contact

All KilBac® additives are listed by FDA as a notified Food Contact Substance.

Flow Rates for Water
(10" Element)



Ordering Guide

| 07A | P | 001 - | 09 | N | N | A | |
|---|---|---|---|--|---|------------|--|
| Media | Core / Assembly | Micron Rating | Length | End Caps | Seal | Branding | Options |
| A - Anti-algae PP B - Anti-bacteria PP | Standard P - Polypropylene D - Reinforced Polypropylene S - Stainless Steel V - Polypropylene with Voile Advantage W - Outer cage + Moulded Ends Y - Outer cage + Reinforced Polypropylene Core + Moulded Ends | 000 - 0.5µm 001 - 1.0 005 - 5.0 010 - 10 020 - 20 | 05 - 125mm 09 - 251 10 - 254 19 - 500 20 - 508 29 - 752 30 - 762 39 - 1002 40 - 1016 60 - 1524 | N - None A - Code A B - Code B* ¹ 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 G - FEP / Viton P - PE Gasket S - Silicone V - Viton | A - Amazon | BB - B-Blue* ² G - Reinforced Polypropylene End Caps |

Example: 07AP005-20NPA = Anti-algae Polypropylene media and core, 5µm rating, double length 508mm (20") long, with Polyethylene seal.

*1 Code B - to fit Amazon 50 Series housings only

*2 B-Blue cartridges available in 251 and 508mm lengths, double open ended only.

AMAZON FILTERS LTD.

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07A/B_03 SupaGard KilBac