Activated Carbon, a porous substance with strong physical adsorption properties, has the highest volume of adsorbing porosity of any material known.

By carbonisation and activation, activated carbon can be made from many substances containing high carbon content such as coal, wood, bamboo and coconut shells.

Activated carbon filters are widely applied in industrial process and civil use as the most efficient method of removing odours, chlorine, volatile organic compounds (VOC), colours, tastes and other contaminants from fluids.

The Porvair Carbofil™ series is the new generation of carbon cartridges produced by the extrusion process. They provide long service life and superior adsorption performance compared to conventional granular activated carbon cartridges together with minimum fines. With a high mechanical strength and low ash content, the carbon block structure prevents channelling, fluidizing or unloading of carbon fines.

To prevent premature blocking of the activated carbon layer, the Carbofil™ filters incorporate an effective pre-filtration layer designed to intercept gels and large particles.

The Carbofil™ series activated carbon filter cartridges use premium grade coconut shell extruded carbon blocks and can be supplied in any length and end cap configuration, to meet the requirements of the process application.

**Applications**

- PCB solutions
- Plating and coating solutions
- Industrial water treatment
- Drinking water treatment
- Chlorine and VOC removal
- Tastes, odours and organic pigments
- Chlorinated compounds reduction
- Oils and aromatic compounds removal

**Features and Benefits**

- Safe handling without any loose powder
- Sanitary installation and removal
- Fits into a variety of standard filter housings
- Rapid and high capacity adsorption of contaminants
Specifications

Materials of Manufacture

Filter media: PAC impregnated cellulose
Netting: Polyethylene
Reinforcement backing: Cellulose polyester
Core: Polypropylene
Outer support: Polypropylene
End caps: Polypropylene

Cartridge Dimensions (Nominal)

Outside diameter: 70mm (2.8”)
Inside diameter: 27mm (1.1”)
Length: 254mm (10”)
508mm (20”)
762mm (30”)
1016mm (40”)

Gaskets and O-Rings

Ethylene Propylene

Operating Temperature

From 40ºF (4ºC) to 125ºF (52ºC)

Cartridge Performance

<table>
<thead>
<tr>
<th>Filter Code</th>
<th>Dimensions (mm)</th>
<th>Micron Rating (µm)</th>
<th>Initial ∆P [psi] @ flow rate lpm</th>
<th>Chlorine Reduction @ flow rate lpm</th>
</tr>
</thead>
<tbody>
<tr>
<td>CR05-N1</td>
<td>70mm OD x 27mm ID x 250mm</td>
<td>5</td>
<td>1.4psi @ 4 lpm</td>
<td>&gt;23,000 litres @ 4 lpm</td>
</tr>
<tr>
<td>CR05-N2</td>
<td>70mm OD x 27mm ID x 508mm</td>
<td>5</td>
<td>1.5psi @ 8 lpm</td>
<td>&gt;46,000 litres @ 8 lpm</td>
</tr>
<tr>
<td>CR05-N3</td>
<td>70mm OD x 27mm ID x 762mm</td>
<td>5</td>
<td>1.5psi @ 15 lpm</td>
<td>&gt;69,000 litres @ 15 lpm</td>
</tr>
<tr>
<td>CR05-N4</td>
<td>70mm OD x 27mm ID x 1016mm</td>
<td>5</td>
<td>1.5psi @ 20 lpm</td>
<td>&gt;92,000 litres @ 20 lpm</td>
</tr>
</tbody>
</table>

Additional Information

The Carbofil™ cartridge will contain a very small amount of carbon fines (very fine black powder) and a new cartridge after installation should be flushed with sufficient water to remove traces of the fines from your water system before using the water. It is recommended that you run (flush) for at least 20 seconds prior to using water.

Estimated capacity tested at given flow rate using 2ppm free available chlorine at continuous flow to with greater than 90% reduction. Increased flow rates may result in less effective chlorine reduction.

Micron ratings are based on 85% removal of given particle size.

WARNING

For drinking water applications, do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

Porvair Filtration Group Ltd.
Queensway
Stem Lane, New Milton,
Hampshire, BH25 5NN, UK
Tel: +44 (0) 1425 612010
Email: info@porvairfiltration.com

Porvair Filtration Group Inc.
301 Business Lane
Ashland, Virginia 23005, USA
Tel: +1 804 550 1600
Email: infoUS@porvairfiltration.com

Porvair Filtration Group
Chengdong Area
Square Industrial Park, North District
Xiaogan Economic Development Zone
Xiaogan, 432000, China
Tel: +86 25 5758 1600
Sales: +86 151 0101 2510
+86 189 3686 6188
Email: infoCN@porvairfiltration.com

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