

HOBRAFILT® - “AC” series depth filter sheets containing immobilised activated carbon

The filter sheets are made from health-safe raw materials, especially various types of cellulose, high quality diatomaceous earth, wet strength agents and activated carbon obtained from wood. Generally, sheets containing activated carbon are not called “filter sheets”, but they are products which can “treat” liquids. The sheet is, basically, a supportive structure with immobilized activated carbon and enabling its utilization.

Typical applications

- Discolouration – blood products, glucose solutions, antibiotics, solvents, sugar syrups, cosmetic preparations, silicone oils, galvanic chemicals, spirits.
- Deodorization – fruit juices, beverages
- Dechlorination - water
- Taste removal – food and beverages

The AC series filter sheets are available in two versions differing in activated carbon content:

- the standard type has approx. 46% activated carbon
- the extra version has approx. 60% activated carbon

All “AC” series sheets are made of one kind of steam activated carbon. That percentage is calculated according to the weight so a light plate will have less a. carbon than the standard one even though both have the same proportion. See the table below for details:

Grade	Basis weight (g/m ²)	Thickness (mm)	Ash content (%)	Approx. a. carbon proportion	Approx. a. carbon weight (g/m ²)
S1345 AC	1.300	3.9 - 4.4	9.5 - 15.8	46%	585
S1360 AC	1.300	4.0 – 4.5	< 5	60%	780
S1045 AC	1.080	3.3 – 3.7	9.5 – 15.8	46%	450

Extractable ions

Ca	Mg	Fe
< 1	< 0.5	< 0.05

Extractable substances

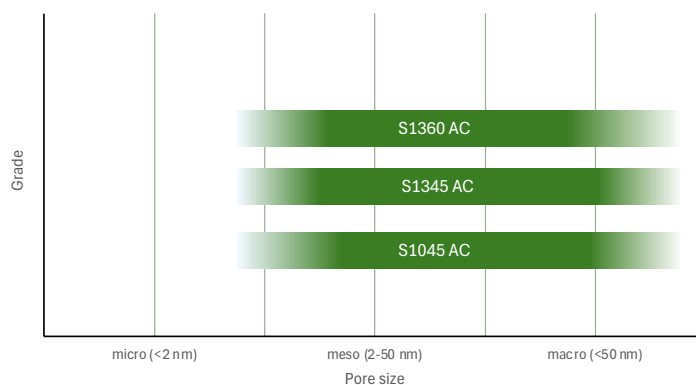
Heavy metals	< 50 ppm
MCPD/DCP from wet strength agent	In accordance with legal regulations
GMO	Not present
Allergic substances	Not present

Recommended operating conditions

Maximum differential pressure	2,5 bar
Change out differential pressure	1,5 bar
Rinsing volume	50 L/m ²
Sterilization	Hot water 85°C / Steam 125°C
General filtration process	Activated carbon acts through contact with the liquid, so contact time and flow rate per m ² are key factors. Use fresh sheets, as activated carbon performance declines with each filtration cycle. Mixing early and late filtrates (“tank-to-tank”) helps balance quality. To enhance effect, reduce flow rate, increase sheet area, use sheets with more activated carbon, or apply recirculation.
Filtration flow rate	450 l/m ² /h (or based on specific application)
Regeneration	Not applicable (due to adsorption-based exhaustion)



Hobrafilt “AC” - activated carbon pore size distribution



The “AC” series depth filter sheets are available in all standard sizes as well as in special cutouts. They are also available with covering safety paper (KP) both glued to the plate and inserted freely into the filtration device. The covering safety paper should prevent possible carbon leakage to the filtrate.

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Certifikace:
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