

PURACAP® BIO SD

SINGLE-USE CAPSULES FOR ALLUVIAL FILTRATION



Description

Single-use capsule containing PURAFIX® CH depth filter sheets for alluvial (specifically cake or precoat) filtration technology in a disposable format.

- Easy handling
- Linear scalable from process development to production scale
- Reduction of cross-contamination risks
- No cleaning validation needs

Materials

Component	Material in contact with the filtered product
Filter sheet PURAFIX® CH	Refer to PURAFIX® CH technical data sheet
Plastic material 2" capsules	PA – Polyamide
Plastic material 5" capsules	PP – Polypropylene
Plastic material 10" capsules	PPSU – Polyphenylsulfone

Capsules technical data

	2" BIO SD	5" BIO SD	10" BIO SD
Number of filter sheets	1	1	1
Filter area [m²]	0.002	0.0127	0.0507
Max. cake vol. [L]	0.06	0.381	1.521
Max. amount of DE [Kg] ⁽¹⁾	0.017	0.109	0.435
Max. batch size [L] ⁽²⁾	0.8	5.1	20
In/outlet connection Ø [inches/mm]	Hose barb ¼" / 6.4	Hose barb / TC ⁽³⁾ ⅜" / 9.5	TC ⁽³⁾ ⅜" / 9.5
Air vent	Luer lock	Luer lock	Luer lock
Capsule holder	n/a	n/a	Requested

⁽¹⁾ Based on DE wet volume of 3.5 [L/Kg]

⁽²⁾ Based on 20 g/L DE dosing rate

⁽³⁾ Tri-Clamp

Operating Conditions

	2" BIO SD	5" BIO SD	10" BIO SD
Min. flow rate [L/min.]	0.01	0.065	0.25
Max. operating temp. continuous [°C/°F]	60.0 / 140.0		
Min. operating temp. continuous [°C/°F]	-5.0 / 23.0		
Max. operating pressure at 25 °C [bar/psi]	2.5 / 36.0		
Max. operating pressure at 60 °C [bar/psi]	2.0 / 29.0		

Celpure® DE technical data

	C65	C100	C300	C1000
Permeability [mDarcy]	40.0 – 80.0	70.0 – 140.0	150.0 – 300.0	750.0 – 1250.0
Solids removed [micron] ⁽⁴⁾	0.3 – 0.45	0.3 – 0.45	0.45 – 0.6	1.0 – 2.0
Surface area [m²/g]	6.0 – 7.0	5.0 – 6.0	3.0 – 4.0	1.0 – 2.0
Purity [%]	96.0 – 99.0			
Approx. wet volume [L/kg]	3.5	3.8	3.9	3.9

⁽⁴⁾ The value might change depending on the compressibility of the solids.

Those data and Celpure® of Imerys are for guidance purposes only. Any alluvial product might be used instead.

Leachable & extractables

Component	Material
Filter sheet	Refer to PURAFIX® CH technical data sheet
Capsule	Follows USP Class VI legislation

Quality Assurance

- Certified to:
- ISO 9001 (quality management)
- Compliant to:
- Recommendation XXXVI/1 of the German Federal Institute for Risk Assessment (Bundesinstitut für Risikobewertung, BfR)
 - FDA (US Food and Drug Administration) 21 CFR 177.2260 e-k
 - USP Class VI

Packaging and Storage

PURACAP® BIO SD filter capsules are hygienically packed in plastic bags and placed in cardboard boxes. They must be stored in their original packaging in a dry, odorless, and well-ventilated area. The capsules are intended for immediate use and should be used within 36 months from the date of manufacture.

Disposal

The respective official regulations for disposal must be followed depending on the filtered product. Uncontaminated capsules can be disposed of as non-hazardous waste.

Remarks

The validity of the information cannot be guaranteed for every application. All information is based on current knowledge and does not claim to be complete. No liabilities can be derived from this information. FILTROX reserves the right to make changes in the course of technical improvements.