PURAFIX®
Filter sheets

Standard sizes: 200, 400, 600, 800, 1200 mm | max. 2425 × 1215 mm

Square / Round | Special formats and dimensions on request

PURADISC®
Filter modules

Ø 12" | Ø 16" | Lenses: 5 – 16

HT (high temperature version)

PURADISC® BIO SD
Single-use filter modules

Ø 12" | Ø 16" | Lenses: 2 – 16

TYPES		COARSE FILTRATION					FINE FILTRATION							STERILE FILTRATION				
CH		06	09	15			21	31	41	50	71		101	110		130	140	150
PF	low beta-glucans and endotoxins		09							50		80			120		140	
ZP	zeta-potential			15				31			71							145

Note: All filter sheet types and grades are also available as filter modules.

Additional filter media from this product line					
PURASPIN®	Centrifuge / vacuum depth filter	20 mL			(incl. centrifuge tube)
PURACAP®	Capsule for sheet filtration	2"			
PURACAP® BIO SD	Capsule for alluvial filtration	2"	5"	10"	

Note: PURASPIN® and PURACAP® availabe with different PURAFIX®, above mentioned grades inserted.



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Technical Data Sheet

PURADISC® BIO SD

SINGLE-USE MODULES FOR ALLUVIAL FILTRATION

Description

Lenticular depth filter module using the advantages of the 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
- Filter area / space for filter cake adaptable

Materials

Component	Material
PURAFIX® CH	Refer to PURAFIX® CH Technical data sheet
Module's plastic	Polypropylene
Bag plastic	Multilayer with fluid contact film in LDPE
Tubes	Platinum cured silicone with polyester braid
Connectors	All common type

Modules technical data

	12"M BIO SD		12"S BIO SD		
Number of lenses	2	3	4	5	6
Filter area [m²]	0.22	0.33	0.44	0.55	0.66
Max. cake vol. [L]	4.8	3.5	11.2	9.9	8.9
Remaining vol. after blow-out [L](1)	5.5	4.5	5.8	5.1	4.7
Max. amount of DE [Kg](2)	1.4	1.0	3.2	2.8	2.5
Max. batch size [L](3)	65.0	46.0	150.0	132.0	119.0
In/outlet connection Ø [inches/mm]	½" / 12.7				
Air vent Ø [inches/mm]	⅜" / 9.5				

	12"D BIO SD			16"D BIO SD		
Number of lenses	8	10	12	8	10	12
Filter area [m²]	0.88	1.1	1.32	1.81	2.26	2.71
Max. cake vol. [L]	22.4	19.8	17.8	46.1	40.7	36.6
Remaining vol. after blow-out [L](1)	5.8	5.1	4.7	10.3	9.1	8.4
Max. amount of DE [Kg](2)	6.4	5.7	5.1	13.2	11.6	10.5
Max. batch size [L](3)	299.0	264.0	238.0	615.0	542.0	488.0
In/outlet connection Ø [inches/mm]	¾" / 19.5			1" / 25.4		
Air vent Ø [inches/mm]	⅜" / 9.5			⅜" / 9.5		

(1) Volume of support system below lowest filter lens. Can be reduced by the use of a 5" capsule
(2) based on DE wet density of 3.5 [L/Kg]
(3) Based on 20 g/L DE dosing rate

Operating Conditions

	12"M	12"S	12"D	16"D
Min. flow rate [L/m²/h]	300.0			
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]	3.0 / 43.5			
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 density [L/kg]	3.5	3.8	3.9	3.9

(4) The value might change depending on the compressibility of solids.
Those data and Celpure® of Imerys are for guidance purposes only. Any alluvial product might be used instead.

Hardware support system technical data

DISCSTAR™ BIO SD	12"M	12"S	12"D	16"D
Volume empty system [L]	13.6	25	51	90
Volume after filtration [L]	10.1	16.4	33	53.7
Max. volume after blowing out [L]	5.5	5.8	5.8	10.3
Max. operating pressure at 25 °C [bar/psi]	3.0 / 43.5			
Max. operating pressure at 60 °C [bar/psi]	2.0 / 29.0			

Extractables

Component	Material
Filter sheet	Refer to PURAFIX® CH Technical data sheet
Module	Refer to the validation guide for PURADISC® BIO SD
Bag plastic	Refer to separate validation guide of bag supplier
Tubes	Refer to separate technical data sheet of the respective tubes supplier
Connectors	Refer to separate validation guide of the respective connectors supplier

Validation guides available under request

Quality Assurance

Certified to:
- ISO 9001 (quality management)
- ISO 14001 (environmental management)
- ISO 22000 (food safety)
- Kosher standard

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

Filter modules 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 modules 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 modules 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.

DOCID-1519739887-1994 / Version: 2.0