

# BECO and BECOPAD depth filter sheets



*Powering Business Worldwide*

# Depth filter sheets - the heart of many filtration solutions

Eaton is a leading supplier of complete depth filtration solutions and develops, manufactures and provides high-quality depth filtration media for food, beverage, fine chemical and pharmaceutical applications.

Depth filter sheets are used for coarse, clarifying and fine filtration and are particularly suitable for microbial reduction and removal, as well as upstream protection of membranes. The application of support sheets ranges from recovery of valuable material, such as protein precipitate, to support material for pre-coat filtration.

Finely fibrillated cellulose fibers are combined with filtration-active components to manufacture BECO® depth filter sheets. Whereas, BECOPAD® depth filter sheets are constructed of high-purity cellulose fibers without the addition of mineral components.

They are used as filter media in BECODISC® stacked disc cartridges, BECO PROTECT® CS CellStream depth filter cartridges and BECO® MiniCap® disposable filter units.

The product range of depth filter media also contains filtration systems in a range of designs and sizes.

Enclosed systems:

- BECO INTEGRA PLATE™ plate and frame filters
- BECO INTEGRA DISC™ stacked disc cartridge housings
- BECO INTEGRA CART™ cartridge housings
- BECO INTEGRA SOLO™ single-sheet filters
- BECO INTEGRA LAB™ laboratory filters

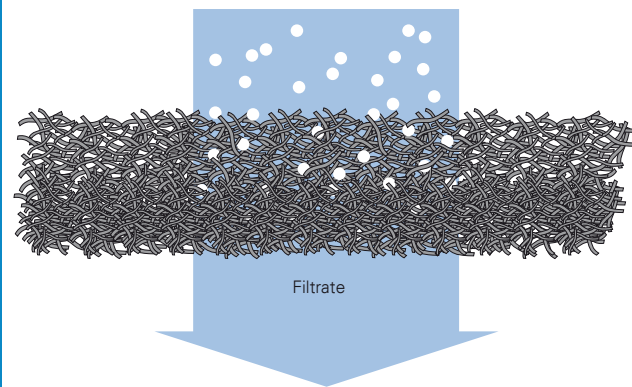
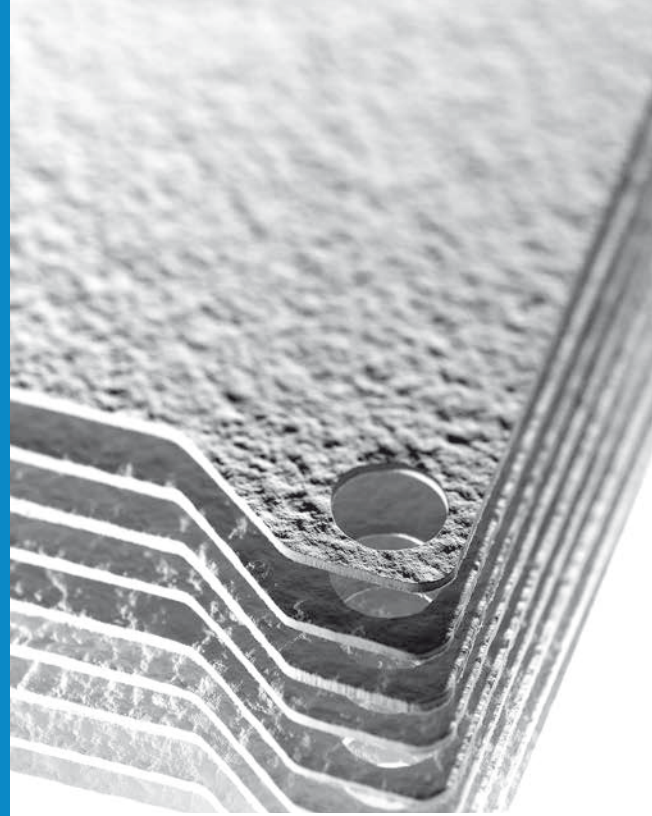
Classic systems:

- BECO COMPACT PLATE™ plate and frame filters

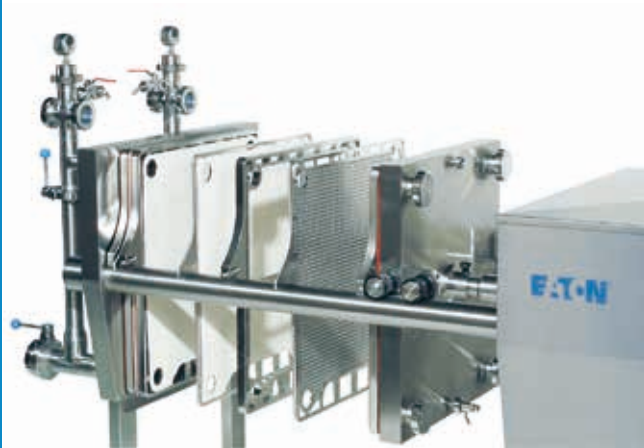
Eaton depth filter sheets meet national and international quality standards, such as:

- LFGB standard (German Food, Commodity and Feed Act) in Germany
- FDA guidelines (Food and Drug Administration) from the USA

For further information, please refer to the Declaration of Conformity documents, technical data sheets and Validation Guides, especially for the pharmaceutical industry.



Principle of depth filtration



# BECO and BECOPAD Depth Filter Sheet Ranges

## Selection guide

For a wide range of applications



### BECOPAD

Premium depth filter sheets made of cellulose, characterized by high-purity, strength and performance for excellent color and flavor fidelity.

**Main applications:**

Wine, beer, fruit juices, spirits, food, fine/specialty chemistry, biotechnology, pharmaceutical, cosmetics



### BECO standard

Depth filter sheets with excellent clarification performance for reliable removal from particles to microorganisms due to optimal pore structure and adsorption.

**Main applications:**

Wine, beer, fruit juices, spirits, food, fine/specialty chemistry, biotechnology, pharmaceutical, cosmetics



### BECO CPS

Depth filter sheets with high dirt-holding capacity and burst strength for filtration of liquids with high viscosity or particle load.

**Main applications:**

Fine/specialty chemistry, biotechnology, pharmaceutical, cosmetics, food, fruit juices

Activated carbon depth filter sheets



### BECO ACF 07

Immobilized activated carbon imparts high adsorption capacity to carbon depth filter sheets for removal of colors, odors and undesirable byproducts from liquids.

**Main applications:**

Fine/specialty chemistry, biotechnology, pharmaceutical, cosmetics, fruit juices, spirits, food



### BECO CP1

Depth filter sheets specifically manufactured with reduced thickness for polishing filtration of viscous liquids.

**Main applications:**

Fine/specialty chemistry, cosmetics

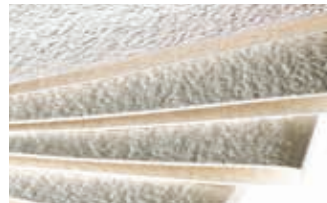


### BECO SELECT A

Depth filter sheets specifically manufactured with reduced calcium and magnesium for prevention and removal of haze while preserving color and flavor.

**Main applications:**

Spirits, flavors and fragrances



### BECO ENDURA

Reusable support sheet for pre-coat filtration. Excellent wet strength combined with an optimal filter surface texture for removal of filter cake with ease.

**Main applications:**

Beer, food, fine/specialty chemistry, cosmetics

Low endotoxin content suitable for pharmaceutical applications



### BECOPAD P

Depth filter sheets composed of high-purity cellulose with low extractables, extremely low endotoxin content (<0.025 EU/ml) after rinsing with 25 l/m<sup>2</sup> WFI (Water for Injection) and up to 50 % reduction of rinse volume.

**Main applications:**

Pharmaceutical, fine/specialty chemistry, biotechnology

[A Validation Guide is available upon request.](#)



### BECO PR

Depth filter sheets with excellent clarification performance for reliable removal of particulate, microorganisms and retention of endotoxins due to optimal combination of depth filtration and adsorption. An endotoxin content of <0.125 EU/ml after rinsing with 50 l/m<sup>2</sup> WFI is achieved.

**Main applications:**

Pharmaceutical, fine/specialty chemistry, biotechnology

[A Validation Guide is available upon request.](#)



### BECO PR ENDURA S

Support sheets specifically formulated for pre-coat filtration and valuable product recovery. The unusual surface qualities enable quick paste release in applications such as plasma fractionation. An endotoxin content of <0.08 EU/ml after rinsing with 50 l/m<sup>2</sup> WFI is achieved.

**Main applications:**

Pharmaceutical, fine/specialty chemistry, biotechnology

[A Validation Guide is available upon request.](#)

## Technical data

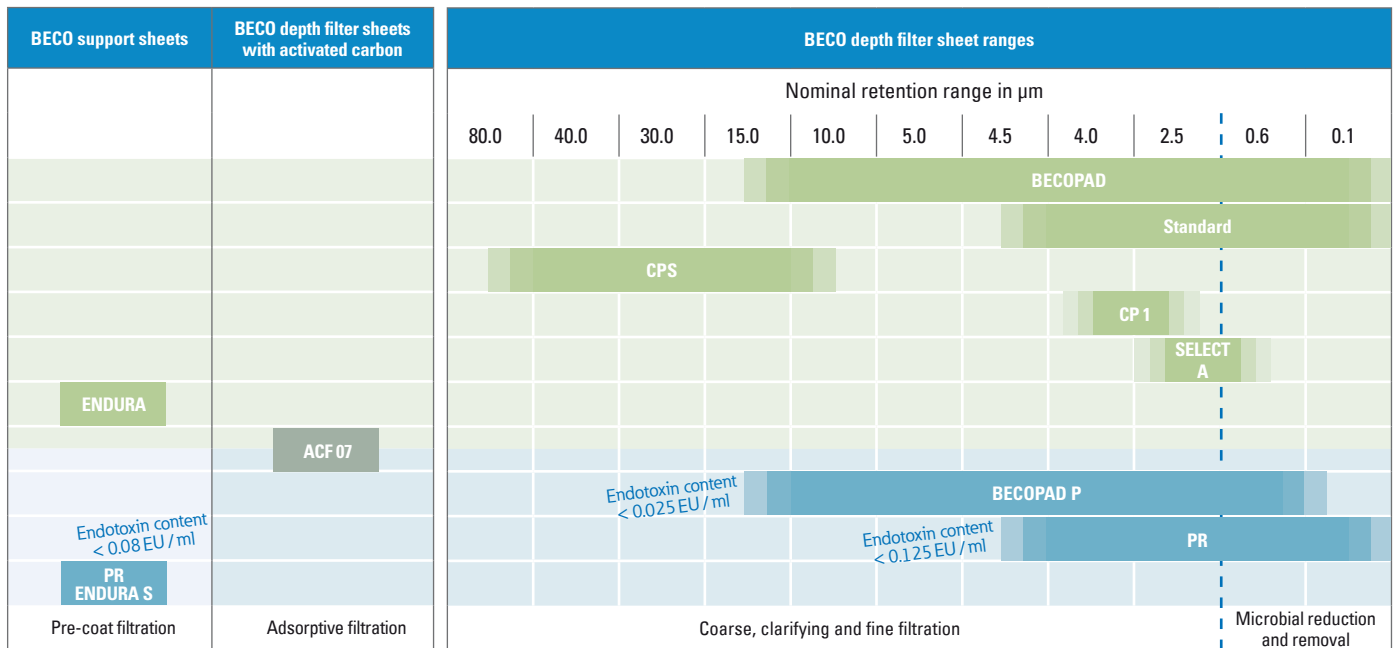
Range	Type	Article number	Nominal retention rate µm	Thickness mm	Ash content %	Bursting strength wet kPa <sup>1</sup>	Water throughput Δ p = 100 kPa <sup>1</sup> l/m <sup>2</sup> /min	Endotoxin content EU/ml
BECOPAD	BECOPAD 115 C <sup>2</sup>	Q2C11	0.1 – 0.2	4.1	<1	>150	26	-
	BECOPAD 120 <sup>2</sup>	Q2112	0.1 – 0.3	3.9	<1	>150	54	-
	BECOPAD 170 <sup>2</sup>	Q2117	0.2 – 0.4	3.9	<1	>150	77	-
	BECOPAD 220 <sup>2</sup>	Q2122	0.3 – 0.5	3.9	<1	>150	100	-
	BECOPAD 270 <sup>2</sup>	Q2127	0.5 – 0.7	3.9	<1	>150	135	-
	BECOPAD 350 <sup>2</sup>	Q2135	0.7 – 1.0	3.9	<1	>150	160	-
	BECOPAD 450 <sup>2</sup>	Q2145	1.0 – 2.0	3.9	<1	>150	300	-
	BECOPAD 550 <sup>2</sup>	Q2155	2.0 – 3.0	3.9	<1	>150	570	-
	BECOPAD 580 <sup>2</sup>	Q2158	8.0 – 10.0	3.9	<1	>150	3571	-
BECO standard	BECO Steril S 100	26950	0.1	3.9	58	>50	30	-
	BECO Steril S 80	26800	0.2	3.9	50	>80	46	-
	BECO Steril 60	25600	0.3	3.8	50	>50	60	-
	BECO Steril 40	25400	0.4	3.8	49	>50	69	-
	BECO SD 30	24300	0.5	3.8	50	>50	84	-
	BECO KDS 15	23150	0.6	3.8	50	>50	115	-
	BECO KDS 12	23120	0.8	3.8	50	>50	155	-
	BECO KD 10	22100	1.0	3.8	50	>50	185	-
	BECO KD 7	22070	1.5	3.8	50	>50	225	-
	BECO KD 5	22050	2.0	3.8	50	>50	270	-
	BECO KD 3	22030	2.5	3.8	50	>40	425	-
	BECO K2	21020	3.0	3.8	46	>50	1550	-
	BECO K1	21010	4.0	3.8	42	>60	1900	-
		BECO CP07S	27108	15.0	3.6	35	>110	4290
BECO CPS	BECO CP03S	27123	20.0	3.7	35	>90	7140	-
	BECO CP02S	27122	25.0	3.3	17	>90	9520	-
	BECO CP01S	27121	30.0	4.6	16	>100	12500	-
	BECO CP2KS <sup>2</sup>	27031	27.0	2.9	<1	>150	9760	-
	BECO CP1KS <sup>2</sup>	27021	40.0	4.3	<1	>150	22620	-
BECO CP1	27110	3.0	2.6	48	>100	1070	-	
BECO SELECT A	BECO SELECT™ A 20	27620	0.8	4.4	43	>40	160	-
	BECO SELECT A 40	27640	2.5	4.4	43	>40	300	-
BECO ENDURA	BECO ENDURA™ <sup>2</sup>	29200	-	3.4	<1	>700	4290	-
BECO ACF-07	BECO ACF 07	19207	-	3.8	15	>40	1415	-
	BECO ACF 07 with protective paper	19307	-	3.6	16	>30	600	-
BECOPAD P	BECOPAD P 170 <sup>2</sup>	Q1117	0.2 – 0.4	3.9	<1	>150	77	<0.025 <sup>3</sup>
	BECOPAD P 270 <sup>2</sup>	Q1127	0.5 – 0.7	3.9	<1	>150	135	<0.025 <sup>3</sup>
	BECOPAD P 350 <sup>2</sup>	Q1135	0.7 – 1.0	3.9	<1	>150	160	<0.025 <sup>3</sup>
	BECOPAD P 550 <sup>2</sup>	Q1155	2.0 – 3.0	3.9	<1	>150	570	<0.025 <sup>3</sup>
	BECOPAD P 580 <sup>2</sup>	Q1158	8.0 – 10.0	3.9	<1	>150	3571	<0.025 <sup>3</sup>
BECO PR	BECO PR Steril S100	27295	0.1	3.9	58	>50	30	<0.125 <sup>4</sup>
	BECO PR Steril S 80	27280	0.2	3.9	50	>80	46	<0.125 <sup>4</sup>
	BECO PR Steril 40	27240	0.4	3.9	49	>50	61	<0.125 <sup>4</sup>
	BECO PR 12	27212	0.8	3.9	50	>130	175	<0.125 <sup>4</sup>
	BECO PR 5	27205	2.0	3.9	50	>60	330	<0.125 <sup>4</sup>
	BECO PR 1	27200	4.0	4.3	48	>45	2381	<0.125 <sup>4</sup>
BECO PR ENDURA S	BECO PR ENDURA S <sup>2</sup>	29450	-	1.5	<1	>400	770	<0.08 <sup>4</sup>

<sup>1</sup> 100 kPa = 1 bar | <sup>2</sup> Without the addition of mineral components | <sup>3</sup> Determination after rinsing with 25 l/m<sup>2</sup> WFI (Water for Injection) | <sup>4</sup> Determination after rinsing with 50 l/m<sup>2</sup> WFI





## Retention ranges and filtration tasks



## Ordering information

### BECOPAD depth filter sheets

#### Note for orders:

Our 8-digit order no. consists of two parts:

- the 5-digit article no. and
- the 3-digit format no.

#### Examples for the format no. code:

Format 200 x 200 mm = format no. 120

Format 400 x 400 mm = format no. 140

Format 600 x 615 mm = format no. 160

#### Example for order no.:

BECOPAD 350 in format 400 x 400 mm = 140

Type	Article no.	Nominal retention range µm
BECOPAD 350	Q2135	0.7 – 1.0

Article no. **Q2135140** Format no.

### BECO depth filter sheets

#### Note for orders:

Our 8-digit order no. consists of two parts:

- the 5-digit article no. and
- the 3-digit format no.

#### Examples for the format no. code:

Format 200 x 200 mm = format no. 120

Format 400 x 400 mm = format no. 140

Format 600 x 615 mm = format no. 160

#### Example for order no.:

BECO Steril S 80 in format 400 x 400 mm = 140

Type	Article no.	Nominal retention range µm
BECO Steril S 80	26800	0.2

Article no. **26800140** Format no.

All common square or round filter sizes are available for delivery. Special formats are available upon request.

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