

## Depth Filtration EUROPOR® K Range

### Depth Filter Sheets

EUROPOR K depth filter sheets from Eaton's Begerow Product Line are developed to meet exceeding requirements in the filtration of beverages. The depth filter sheets of this range cover a complete range of filtration grades from 4.5 to 0.2 µm nominal rating. In this way filtration applications for which particular retention efficiency is required can be selected.

The specific advantages of EUROPOR K depth filter sheets:

- Reliable retention of undesirable components thanks to an ideal pore structure.
- Excellent clarifying efficiency because of high-quality raw materials.
- Economical filter lifetimes through high dirt holding capacity.
- Comprehensive quality control of all raw materials and auxiliary materials.
- In-process inspections to guarantee consistent quality

#### Germ Removing

##### EUROPOR K 70, K 60, K 40

Depth filter sheets with a high contaminant retention capacity. These depth filter sheet types are particularly suitable for cold sterile bottling or storage of beverages. The excellent retention capacity is ensured by the fine pore structure of EUROPOR K depth filter sheets combined with adsorptive electrokinetic properties.

Thanks to their high retention capacity for colloidal substances these filter sheet types do excellent service as a pre-filter before membrane filtration.

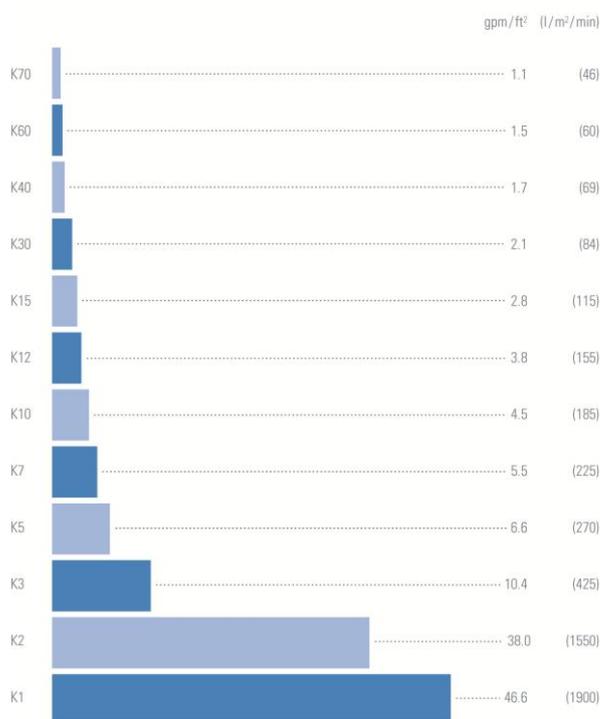
#### Fine Filtration, Germ Reduction

##### EUROPOR K 30, K 15, K 12, K 10, K 7, K 5

Depth filter sheets for achieving a high grade of clarification. These sheets retain ultrafine particles reliably and have a germ-reducing effect. They are therefore particularly suitable for haze-free filtering of beverages prior to storage and bottling.



#### Water throughput EUROPOR range



Conditions: Δp = 14.5 psi (100 kPa, 1 bar), Medium: Water at 68 °F (20 °C)

## Coarse Filtration

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### EUROPOR K 3, K 2, K 1

Depth filter sheets with a large-volume pore structure. These sheets have a high dirt holding capacity for particles and are especially suitable for clarifying filtration applications.

## Components

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EUROPOR K depth filter sheets are made from pure natural materials and cationic resin. They contain varying quantities of finely fibrillated cellulose fibres of hardwood and softwood, diatomaceous earth, and perlite.

## Instructions for Correct Use

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EUROPOR K depth filter sheets require careful handling when inserting them into the plate and frame filter. Avoid banging, bending, and rubbing the sheets. Do not use damaged depth filter sheets.

### Inserting

Each depth filter sheet has a rough side and a smooth side. The rough side of the depth filter sheet is the filtrate side; the smooth side is the filtrate side. Always ensure that the filtrate side is in contact with the clear filtrate plate when inserting the sheets.

## Sanitizing and Sterilizing (Optional)

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The wetted EUROPOR K depth filter sheets may be sterilized with hot water or saturated steam up to a maximum temperature of **250 °F (121 °C)**. The pressed filter package should be loosened slightly. Make sure to sterilize the entire filter system thoroughly. Do not apply final pressure until after the filter package has cooled down.

### Sterilizing with Hot Water

The flow velocity should at least equal the filtration capacity.

The water should be softened and free of impurities.

Temperature:	> 185 °F (85 °C)
Duration:	25 minutes after the temperature has reached 185 °F (85 °C) at all valves.
Pressure:	At least 7.2 psi (50 kPa, 0.5 bar) at the filter outlet.

### Sterilizing with Steam

Steam quality:	The steam must be free of foreign particles and impurities.
Temperature:	Max. <b>250 °F (121 °C)</b> <b>(saturated steam)</b>
Duration:	Approx. 20 minutes after steam escapes from all filter valves.
Rinsing:	After sterilizing with 13.2 gal/sqm (50 l/m <sup>2</sup> ) at 1.25 times the flow rate.

## Filter Preparation and Filtration

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Unless already completed after sterilization, Eaton recommends pre-rinsing the closed filter with 13.2 gal (50 l) of water per square meter at 1.25 times the flow rate prior to the first filtration. Depending on the application, this usually equals a rinsing time of 10 to 20 minutes. Test the entire filter for leakage at maximum operating pressure.

High-proof alcohol solutions and chemical products that do not allow pre-rinsing with water, should be circulated for 10 to 20 minutes. Dispose of the rinsing solution after rinsing.

## Safety

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When used and handled correctly, there are no known unfavorable effects associated with this product.

Further safety information can be found in the relevant Material Safety Data Sheet, which can be downloaded from our website.

## Waste Disposal

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Due to their composition EUROPOR K depth filter sheets are biodegradable. Relevant current regulations must be followed, depending on the filtered product.

## Storage

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EUROPOR K depth filter sheets consist of strongly adsorbing materials. The product must be handled carefully during shipping and storage. Store the depth filter sheets in a dry, odor-free, and well ventilated place.

Do not expose the depth filter sheets to direct sunlight.

EUROPOR K depth filter sheets are intended for immediate use and should be used within 24 months of delivery.

## Available Formats

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

HS Customs Tariff: 4812 00 00

## Certified Quality

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The laboratory inspects EUROPOR K depth filter sheets for constant high quality. These inspections comprehend technical parameters as well as chemical purity and the quality generally recognized as safe.

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Not all products in Eaton's Begerow Product Line are available in all regions. Please contact your local Eaton office to determine availability.

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