

## Product Information

### Depth Filter Sheets of the K-Series

With 13 different retention rates the K-series represents the standard depth filter sheet series of Pall SeitzSchenk Filtersystems. These sheets consist of a cellulose matrix which contains very fine kieselguhr mixtures and perlite as filtration-active substances.

The SEITZ-EKS®, the SEITZ-EK® 1 and the SEITZ-EK® are used for sterilising filtration duties, whereas the SEITZ-KS® 50 and SEITZ-KS® 80 are classified as micro-organism-reducing depth filters. They can produce a sterile filtrate at low organism counts in the unfiltered product. K 100 through to K 900 cover the entire range from fine filtration via clarifying filtration to coarse filtration.

#### Sterilising filtration with Pall SeitzSchenk depth filters

Pall SeitzSchenk filter sheets for sterilising filtration are chosen depending on the microbiological

status of the product. It is imperative that the differential pressure is limited to a max. figure of 150 kPa (1.5 bar). The flow velocity should not exceed 525 L m<sup>-2</sup> h<sup>-1</sup>. These figures may be lower in case of difficult or demanding products.

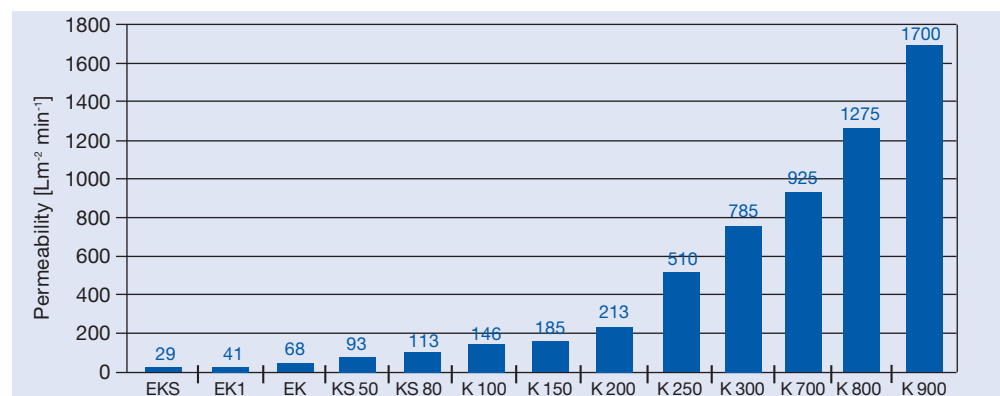
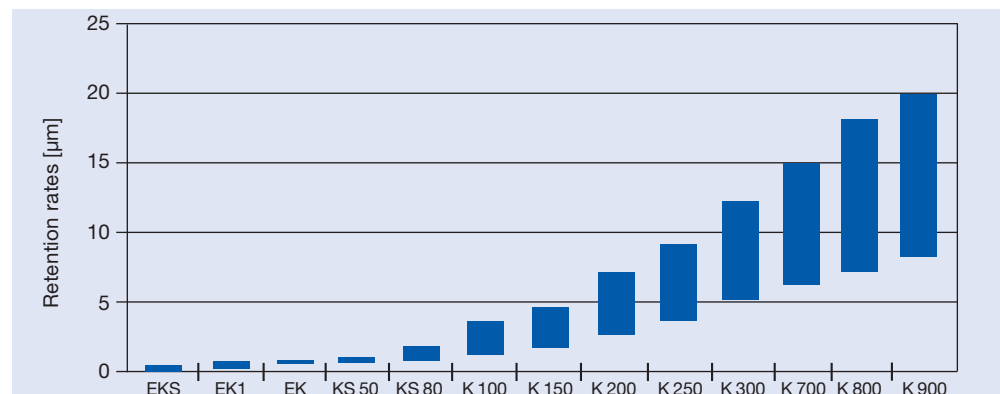
For safety reasons we recommend filtration through a Pall SeitzSchenk membrane filter cartridge downstream of depth filter sheets.

#### Typical LRV-figures (Log Reduction Value)

SEITZ-EKS®	8.5*
SEITZ-EK® 1	7.5*
SEITZ-EK®	7.0**
SEITZ-KS® 50	6.5**
SEITZ-KS® 80	6.0**

\* Test organism: *Brevundimonas diminuta*

\*\* Test organism: *Serratia marcescens*



$\Delta p = 100$  kPa (1 bar),  $T = 20^\circ\text{C}$ , medium H<sub>2</sub>O [measurement figure for EKS - K 200 with extrapolation for measurement data at a  $\Delta p = 20$  kPa (0.2 bar)]

## Characterisation

The tests are carried out according to the methods of the Technical/Analytical Work Group within the European Depth Filtration Association or in accordance with in-house test methods.

Sheet	Mass per unit area [g m <sup>-2</sup> ]	Thickness [mm]	Ash [%]
SEITZ-EKS®	1400	3.7	58
SEITZ-EK® 1	1400	3.7	51
SEITZ-EK®	1350	3.7	46
SEITZ-KS® 50	1350	3.7	46
SEITZ-KS® 80	1350	3.7	46
K 100	1350	3.7	46
K 150	1350	3.9	46
K 200	1350	3.9	46
K 250	1300	4.0	46
K 300	1300	4.2	46
K 700	1300	4.1	46
K 800	1300	4.1	46
K 900	1300	4.3	46

## Areas of application

Sheet	Application
SEITZ-EKS®	Liquid sugar (sterilising filtration), Rennet (sterilising filtration/organism reduction)
SEITZ-EK® 1	Fructose oligosaccharides (sterilising filtration), wine (sterilising filtration at high pH values and high bacteria challenges), Rennet (sterilising filtration/organism reduction)
SEITZ-EK®	Wine (sterilising filtration of wine with residual sugar, not susceptible to bacterial spoilage), Rennet (sterilising filtration/organism reduction)
SEITZ-KS® 50	Wine (sterilising filtration of wine prior to hot fill), Rennet (sterilising filtration/organism reduction)
SEITZ-KS® 80	Plant extracts (clarifying filtration), edible gelatine (polishing filtration of thick broth), wine (sterilising filtration of fully fermented white wines, not susceptible to bacterial spoilage), sugar syrup (micro-organism reduction), Rennet (sterilising filtration/organism reduction)
K 100	Fruit juice (fine filtration prior to hot fill), edible gelatine (polishing filtration of thick broth), wine (fine filtration prior to bottling), sugar syrup (fine filtration), Rennet (fine/clarifying filtration)
K 150	Wine (fine clarification), Rennet (fine/clarifying filtration)
K 200	Plant juices, pressed (fine clarification), wine (fine clarification after well settled fining), sugar syrup (fine filtration) Rennet (fine/clarifying filtration)
K 250	Rennet (fine/clarifying filtration)
K 300	Wine (coarse filtration), Rennet (fine/clarifying filtration)
K 700	Wine (coarse filtration after first racking), Rennet (Clarifying filtration)
K 800	Wine (coarse filtration), Rennet (Clarifying filtration)

The figures quoted in the diagrams and tables should be regarded as guidelines.

The following certificates are available

- Technical Data Sheet
- Certificate of Compliance with the Order according to DIN 50049-2.1/EN 10204-2.1
- EU Safety Data Sheet

The depth filters conform to the Recommendation XXXVI/1 BgVV (German Federal Institute for Health Protection of Consumers and Veterinary Medicine) and meet the requirements of the Lebensmittel- und Bedarfsgegenstände-gesetz LMBG (Foodstuff and other Commodities Act), in particular §§ 5, 30 and 31; they can be used for cold filtration of foodstuff without any reservation.

### Important Note!

All information contained in this leaflet is based on today's „State of the Art“ knowledge. It does not claim to be complete, therefore no liability can be accepted. All users are advised to test our products to ensure they meet their specific requirements and to exercise all necessary care when in use. The information in the instruction manuals issued by us should be strictly observed. Departure from our specific instructions means we cannot accept any responsibility for damage which may result. Should you encounter specific problems, please contact our specialists. We reserve the right to make alterations without prior notice.



Pall Corporation

#### Bad Kreuznach – Germany

0049 671 8822 0 telephone  
0049 671 8822 200 fax

#### Portsmouth – United Kingdom

0044 23 92 30 22 69 telephone  
0044 23 92 30 25 09 fax

#### New York – USA

001 516 484 5400 telephone  
001 516 625 3610 fax

#### Melbourne – Australia

0061 395 8481 00 telephone  
0061 395 8466 47 fax

foodandbeverage@pall.com

#### Paris – France

0033 1 30 6138 00 telephone  
0033 1 30 6157 08 fax

#### Milano – Italy

0039 02 47 79 61 telephone  
0039 02 41 22 985 fax

Visit us on the Web at [www.pall.com](http://www.pall.com)

Pall Corporation has offices and plants throughout the world in locations including: Argentina, Australia, Austria, Belgium, Brazil, Canada, China, France, Germany, India, Indonesia, Ireland, Italy, Japan, Korea, Malaysia, Mexico, the Netherlands, New Zealand, Norway, Poland, Puerto Rico, Russia, Singapore, South Africa, Spain, Sweden, Switzerland, Taiwan, Thailand, United Kingdom, United States, and Venezuela. Distributors are located in all major industrial areas of the world.

© Copyright 2006, Pall Corporation. Pall and are trademarks of Pall Corporation.

® Indicates a Pall trademark registered in the USA. *Filtration. Separation. Solution.*<sup>SM</sup> is a service mark of Pall Corporation.