PALL Food and Beverage

OenoPure™ Filter Cartridges
For Wine Final Filtration

Oenopure filter cartridges are developed specifically for cold microbial stabilization of wine.

Description

The Oenopure cartridge is Pall Corporation's most advanced solution for membrane filtration of wine. The cartridge is constructed from a highly inert media ensuring that the level of organoleptic and colloidal interference is negligible. The polyethersulfone membrane is configured in a "laid over" pleat configuration for increased mechanical strength, filter area and exposure to repeated hot water and steam sanitization cycles for longer service life.

The cartridges are available in single open ended (SOE) configurations to fit in sanitary housings to ensure effective microbial removal and assembly integrity.

Features	Benefits
Inert polyethersulfone media	• Minimal impact on organoleptic characteristics • Minimal interaction with valuable colloids • Wide range of chemical compatibility
Hydrophilic membrane	• Easy to wet and integrity test
Laid over pleat configuration	• High area for long service life • Optimal flow distribution • Increased mechanical strength
Validated with wine specific microorganisms	• Brand protection • Increased process safety
Integrity testable	• Brand protection • Documentation for quality records
Resistant to numerous sanitization cycles	• Cost effective • Process reliability
Individually serialized cartridges	• Full traceability

Quality

- Cartridges produced in a controlled environment
- Manufactured according to ISO 9001: 2008 certified Quality Management System

Typical Titer Reduction[1]

Removal Rating	Test Organism	Titer Reduction
0.45 µm	*Oenococcus oeni*	$>10^7$
0.65 µm	*Saccharomyces cerevisiae*	$>10^9$

[1] The typical titer reduction is determined in laboratory liquid challenge tests on 254 mm (10") filter

Materials of Construction

Component	Description
Membrane	Hydrophilic Polyethersulfone
Support and drainage layers	Polypropylene
Endcaps and core	Polypropylene
Cage	TiO_2 filled polypropylene and polypropylene
Adapter	Polypropylene (stainless steel ring in apapter 7, 8 and 41)
O-ring seals	Ethylene propylene rubber or Silicone elastomer

Food Contact Compliance

Please refer to the Pall website www.pall.com/foodandbev for a Declaration of Compliance to specific National Legislation and/or Regional Regulatory requirements for food contact use.

Technical Information

Maximum Allowable Differential Pressure

The maximum allowable differential pressure in the forward flow direction for Oenopure filters is shown in the table below.

Temperature	Max. Differential Pressure[3]
Up to 40 °C (104 °F)	5.5 bard (80 psid)
Up to 80 °C (176 °F)	4 bard (60 psid)

[3] In fully compatible fluids which do not chemically attack, soften or adversely affect the filter in any way

Sterilization and Sanitization

Oenopure filters can be repeatedly steam sterilized or autoclaved *in situ*, or they can be sanitized with hot water or chemicals.

Media	Temperature	Cumulative Time[4]
Steam[5]	125 °C (257 °F)	30 hours
Hot water	90 °C (194 °F)	80 hours
Peracetic acid (PAA) based sanitizer (320 ppm total peroxides)	20 °C (65 °F)	1000 hours

[4] Measured under laboratory test conditions. The actual cumulative time depends on the process conditions.

[5] The maximum allowable pressure drop (forward) during steam steaming at 125 °C (257 °F) is 0.3 bard (4 psid).

Pressure Drop vs. Liquid Flow Rate[6]

Typical GB: 5.3 gpm @ 1.45 psi
20 lpm @ 100 mbar

Typical GK: 7.1 gpm @ 1.45 psi
26.8 lpm @ 100 mbar

[6] Typical initial clean media differential (DP) per 254 mm (10") element for water at 20 °C (68°F); viscosity 1 centipoise. For 505 mm, 762 mm and 1016 mm configurations divide the differential pressure by 2, 3 and 4 respectively. For assistance in filter assembly sizing and housing selection, contact your local Pall Distributor or Pall Corporation directly.

Ordering Information

This is a guide to the Part Numbering structure only. For specific options, please contact Pall.

Example Part Number : **AB1GB7WH4**
See bold reference codes in tables

Part Number: AB ☐ ☐ ☐ W ☐
Table 1 Table 2 Table 3 Table 3

Table 1: Length Options

Code	Nominal Length
1	254 mm (10")
2	508 mm (20")
3	762 mm (30")
4	1016 mm (40")

Table 2: Media Grade Options

Code	Grade
GB	0.45 µm
GK	0.65 µm

Table 3: Adaptor Options

Code	Adaptor
3	Flat end cap, plug-in style with double 222 O-rings
7	Bomb fin with bayonet lock and double 226 O-rings
8	Bomb fin, plug-in style with double 222 O-rings
28	Bomb fin with bayonet lock and double 222 O-rings

Table 4: O-ring Options[1]

Code	O-ring material
H4	Silcone
J	Ethylene Propylene

Pall Corporation

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Pall Corporation has offices and plants throughout the world. For Pall representatives in your area, please go to www.pall.com/contact

Please contact Pall Corporation to verify that the product conforms to your national legislation and/or regional regulatory requirements for water and food contact use.

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