

## DECLARATION OF COMPLIANCE Membralox® Ceramic Membranes

### Part Numbers

**EP1 (P1940), EP2 (P1960), EP3 (P3730), EP4 (P3740), EP5 (P4840), EP6 (P2760)  
EC3 (C1935), EC4 (C0760)**

Membralox ceramic elements comprise asymmetric multi-channel membranes composed of a porous high purity alpha-alumina support and filtering layer(s).

The patented alpha-Alumina end-sealing, sintered into the support porosity, provides superior resistance to corrosion and cleaning cycles while preventing any filtering layer by-pass through element end faces support structure.

The filtering layer(s), cast onto the inner surface of the lumens and sintered, employ Alumina or Zirconia depending on rating:

Microfiltration (MF)	0.1, 0.2, 0.5, 0.8, 1.4, 2, 5 micron Alpha-Alumina
Ultrafiltration (UF)	10, 20, 50, 100 nm Zirconia

Membralox GP membranes have a sintered support structure modification made of high purity alpha-Alumina that creates a permeability gradient along the length of the element.

These membranes benefit from the same features of the other standard Membralox membranes.

An initial flush is recommended prior to use.

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Reference	FBDCMEMLOXENe
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## Membralox Ceramic Membranes

### Components

Support and End-seal		$\alpha$ -Alumina ( $\alpha$ -Al <sub>2</sub> O <sub>3</sub> )
Standard layers	MF	$\alpha$ -Alumina ( $\alpha$ -Al <sub>2</sub> O <sub>3</sub> )
	UF	Zirconia (ZrO <sub>2</sub> )

### Declaration

Membralox ceramic membranes comprise of materials that meet regulatory and legislative requirements and guidelines for food contact in that:

#### Europe

Membralox ceramic membranes meet the requirements for food contact as detailed in European Regulation (EC) Number 1935/2004 in that:

- The materials of construction comply with European Commission Directive number 2005/31/EC relating to ceramics, in relation to lead and cadmium leachables testing in 4 % acetic acid at 22 °C for 24 hours.
- Membralox ceramic materials of construction are approved for drinking water filtration under French Health Minister directive dg5/vs4 2000 -166 March 28, 2000 in annex 1, §II list B.

#### USA

The materials of construction are listed in the FDA requirements for food contact use as detailed in Code of Federal Regulations, 21 CFR paragraphs 170-199 in that:

- Zirconia layers on Alumina support are listed in 21 CFR 177.2910 (Ultrafiltration membranes).
- Membralox crossflow membrane modules, model type SD and HCS conform to 3-A Sanitary Standards (section 45- 02, authorization 1187).

### Process Quality System

Site of Manufacture: Pall Exekia, Bazet, France

The Quality Management System at Pall Exekia, Bazet, is certified to ISO 9001:2015.

These products / product packaging carry a lot number / date code to facilitate traceability to suppliers' materials and Pall production records.

Pall Exekia, Bazet confirms that the product is manufactured in line with the principles of food contact materials GMP as detailed in Regulation 2023/2006

Users should satisfy themselves that these materials are suitable for use in their specific food application.

**Supplied in Europe by**

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