

# fumasep® FHM-1-PS

#### General

*Membrane type:* Reinforced PFSA film sandwiched between non-woven supports, with high water permeability and high mechanical stability.

Application: air humidification

Membranes are identified by membrane type and identification number (Lot. Number). Please refer to this type and identification number in case of queries.

## **Delivery**

The membrane is ready to use.

### Handling

Keep membrane package closed / sealed when unused. Store, handle and process the membrane in a clean and dust-free area. Use only new and sharp knives or blades, when cutting the membrane. Always wear protective gloves when handling the membrane. Handle with care, be sure not to puncture, crease or scratch the membrane, otherwise leaks will occur. All surfaces in contact with the membrane during handling, inspection, storage and mounting must be smooth and free of sharp projections.

## **Pretreatment and Conditioning**

No specific pretreatment required.



### Technical Data Sheet - fumasep® FHM-1-PS

## Physical and chemical data of fumasep® FHM-1-PS

fumasep®	unit	FHM-1-PS
membrane type		air humidification
appearance		textured membrane, white / slightly yellow colored
design		symmetric sandwich structure
reinforcement		Polyphenylensulfid non-woven
Thickness a)	μm	110
weight per unit area	g m <sup>-2</sup>	> 45
water vapour transmission under static conditions b)	g m <sup>-2</sup> s <sup>-1</sup>	> 0.8
maximum tensile strength c)	N mm <sup>-1</sup>	2.4 / 1.0
elongation at maximum tensile strength c)	%	16 / 18
maximum operating temperature	°C	100
bubble point in water <sup>d)</sup>	barg	> 3
Version e)	1.1	Valid from January 7th 2022

- a) measured with micrometer caliper gauge at force 5-10~N b) determined in 1-compartment-cell filled with liquid water on one side against to a dry air at 80 °C with a dry-air-change-rate of  $2~Nm^3/h$  c) determined by stress-strain measurement at T = 70 °C and 50 % r.h., in longitudinal and transversal (long./trans.) direction
- d) The membrane is assembled in a cell were the differential pressure increases till the membrane leaks, burst. The maximum differential pressure is 3 barg in water at standard conditions.
- e) Changes without prior notices may apply.

Note: The product is not certified for drinking water applications. The data are not measured directly on the item supplied. The data sheet does not release the customer of the necessity of a goods inwards control procedure. All information included in this data sheet is based on tests and data believed to be reliable. The data do not imply any warranty or performance guarantee. It is the user's responsibility to examine performance, suitability and durability of the product for the intended purpose. FUMATECH BWT GmbH does not assume any liability for patent infringement resulting from the use of this product. Fumasep® is a trademark of company FUMATECH BWT GmbH.

Hereby, it is certified that all results of the measured item comply with the margins of the internal specification defined in the technical datasheet. All measurements and data recording are conducted in accordance with standardized procedures following the ISO 9001 certification.