

fumasep® FTCM

General

The membrane type FTCM is an ion exchange membrane with excellent mechanical stability and good ionic conductance intended for use in electro dialysis applications.

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

Handling

Handle with care, be sure not to puncture, crease or scratch the membrane, otherwise leaks will occur.

Avoid contact with surface active agents (ionic tenside). All surfaces which may get into contact with the membrane during inspection, storage, pretreatment and mounting must be free of sharp edges or angles.

We recommend to expand the membrane in the process solution before cutting and stack assembly.



Pretreatment and Conditioning

Membranes are delivered in dry form.

For optimal performance, minimal wrinkling and lowest electrical resistance, it is necessary to pretreat membranes after the following prescription:

Put the membrane samples in demineralised water or process solution for at least 16 h at room temperature or 4h at 40°C. In some cases the water becomes turbid during swelling of the membranes. This is no malfunction of the material or indicates a lack of quality. The origin of the turbid is an excess of binder component in the polymer, which is washed off during the pretreatment step.

After swelling the membrane is ready for use.

If you have any concerns about storage, chemical stability and pretreatment before proceeding, please feel free to contact us for further information.

Physical and chemical data

		fumasep FTCM, cation exchange membrane, available in two different fabric reinforcement (PA; PET)
selectivity **)	%	>95
electric resistance *)	$\Omega \cdot \text{cm}^2$	<10
thickness ***)	(mm)	0,50 –0, 60
IEC	meq/g	>2,2
specific conductance	(mS/cm)	>5 ****)
water permeability	ml/m ² h bar	<20

*) measured in Sodium form in 0,5 M NaCl @ RT 25°C)

***) determined from membrane potential measurement in a concentration cell 0,1/0,5 M KCl @ 25°C

****) in dry form

*****) determined in Na⁺-form in 0,5 NaCl @ RT (30°C)

Please note: The measuring data are not measured directly on the item supplied. The data correspond with the measurement of our quality control

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