

fumasep® FBM

General

Membrane type: bipolar membrane consisting of anion-exchange layer, cation exchange layer and catalytic intermediate layer – PK-reinforced.

Water splitting into OH⁻ and H⁺-ions occurs at a potential difference of approximately 0.8 V under standard testing conditions.

Application: Electrodialysis with bipolar membranes.

Physical and chemical data of fumasep® FBM

fumasep®	unit	FBM
Membrane type		bipolar membrane
Appearance ^{a)}		brown
Reinforcement		PK
Counter ion		Sodium ((Na ⁺) / Chloride (Cl ⁻))
Delivery form		Wet in NaCl-Solution
Thickness (wet)	µm	110 - 160
Water splitting current at 1,0 V ^{b)}	mA/cm ²	> 30
Water splitting efficiency at 0,20 V	mA/cm ²	< 0,63
Operating temperature (max.)	°C	40
Version ^{d)}	3.2	04/2026

a) colour may vary. The surface of the membrane may be structured depending on interface layer structure and post-treatment. This does not affect basic performance properties of the membrane.

b) in test cell with 0.5M NaCl solution / 0.25M Na₂SO₄ solution (electrode rinse) at 25°C

d) Fumatech reserves the right to changes without prior notice.

Note:

The product is not certified for drinking water applications. The data are not measured directly on the sheet of membrane supplied.

The data sheet does not release the customer of the necessity of incoming goods inspection.

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 tolerance 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.

FUMATECH BWT GmbH

Carl-Benz-Straße 4

74321 Bietigheim-Bissingen

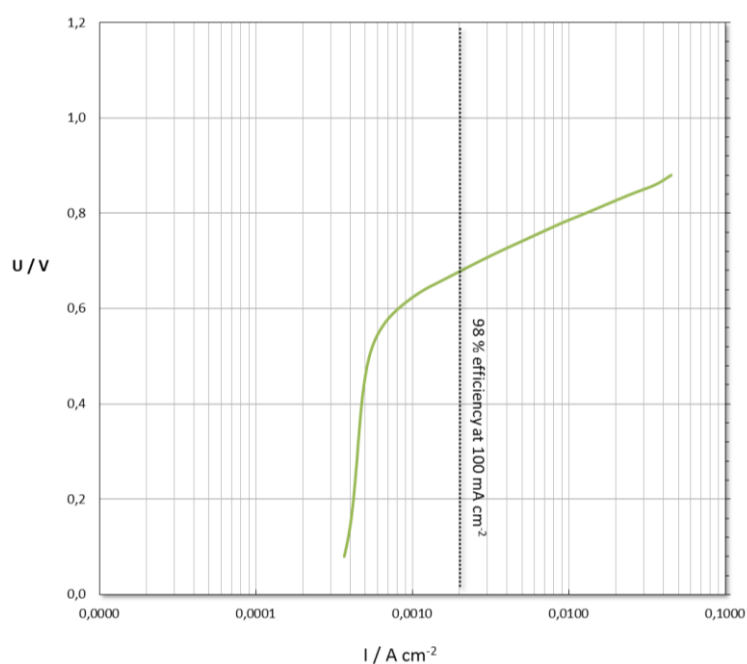
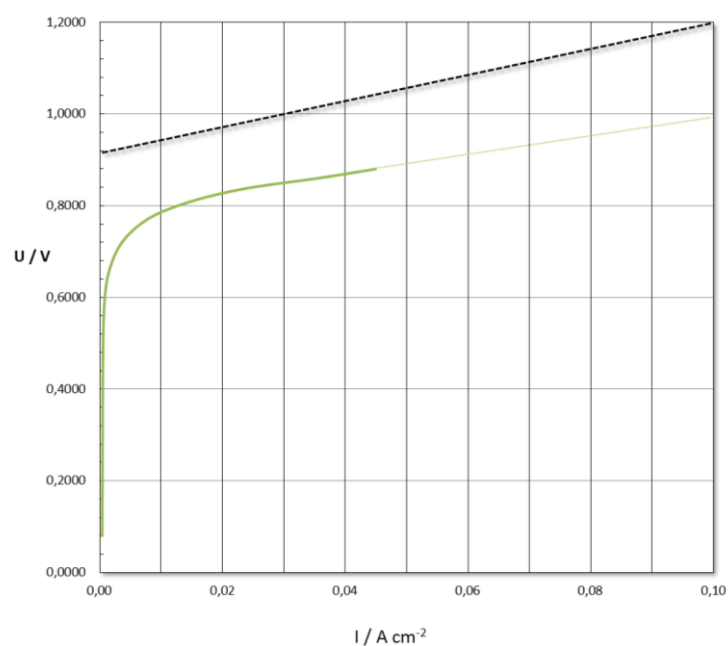
Phone: +49-(0)-7142-3737-900

Fax: +49-(0)-7142-3737-999

Email: sales@fumatech.com

Current – Voltage Characteristics: fumasep® FBM

4-chamber set-up: cathode – Na₂SO₄ – CEM – NaCl – FBM – NaCl – CEM – Na₂SO₄ solution – anode
 4-probe measurement: Haber-Luggin capillary (3 M KCl) with Ag / AgCl reference electrodes
 CEM: Cation exchange membrane FKB
 electrolyte loop: 0.5 M NaCl solution / recombined
 electrode loop: 0.25 M Na₂SO₄ / recombined
 temperature: 25 °C
 fixed scan rate, $\Delta U = 20$ mV, $\Delta t = 20$ s



FUMATECH BWT GmbH

Carl-Benz-Straße 4
 74321 Bietigheim-Bissingen
 Phone: +49-(0)-7142-3737-900
 Fax: +49-(0)-7142-3737-999
 Email: sales@fumatech.com