Forward Osmosis Membrane

The **Aquaporin Inside™** technology is based on the aquaporin protein – Nature's own selective and extremely effective water channel. Aquaporin water channels have been developed through billions of years of evolution, and are now ready to revolutionise industrial water treatment.

Aquaporin Inside™ membranes are protected by several issued and pending patents. Please visit www.aquaporin.dk/patents for updated information.

MEMBRANE SPECIFICATIONS

Membrane Type	Forward Osmosis Membrane
Water Flux	> 7.0 ± 0.5 LMH or L/m^2.hr (n=3)
Salt Flux	< 2.5 ± 0.5 gMH or g/m^2.hr (n=3)
Rejection to Calcein*	99.0 % ± 0.5 % (n=3)

QUALITY CHECK TEST CONDITIONS

Mode	Active – layer facing feed side (ALFS)
Feed Solution	Standard Test - Deionized water (4 ppm NaCl, <10 µS/cm) Rejection Test - 5 µM of Calcein* in Deionized water
Draw Solution	1 M NaCl aqueous solution (58,440 ppm NaCl, 80-90 mS/cm)
Temperature	24 – 25 °C
Cross-flow velocity	5 cm/s

**Calcein is a fluorescent dye, used as trace contaminant for rejection evaluation ($C_{30}H_{26}N_2O_{13}$ – Mw = 622.55 g/mol)*

OTHER INFORMATION

Packaging	Aquaporin Inside™ membrane is sealed in a protective plastic bag.
Shelf-life	3 Months
Storage Condition	4 °C in deionized water (39 °F)
Handling	Handle with care. Avoid folding, scratching and stretching the membrane. We recommend that test coupons are handled and/or held only along their edges and not at the center. Users are advised to wear gloves for handling.

AQUAPORIN ASIA