



UNISOL
Membrane Technology

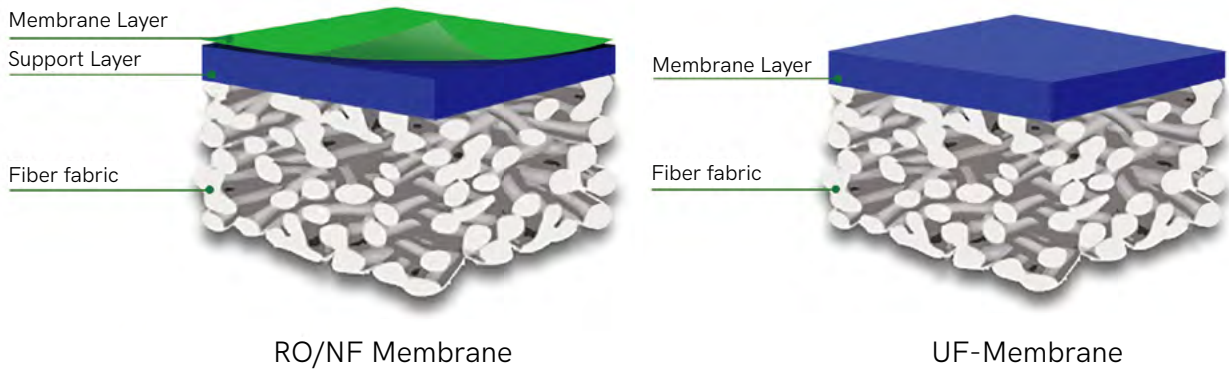


FLAT SHEET MEMBRANES

MF/UF/NF/RO Membranes

Wide Range • High Performance • FDA Compliant


Schematic Cross-section of Membrane





UNISOL provide flat sheet membranes with cut-offs covering the spectrum of micro-, ultra-, nanofiltration and reverse osmosis, for a wide range of applications in various kinds of materials:

- Polyethersulfone
- Polysulfone
- Polyvinylidene Fluoride
- Polyacrylonitrile
- Piperazinamide
- Polyamide

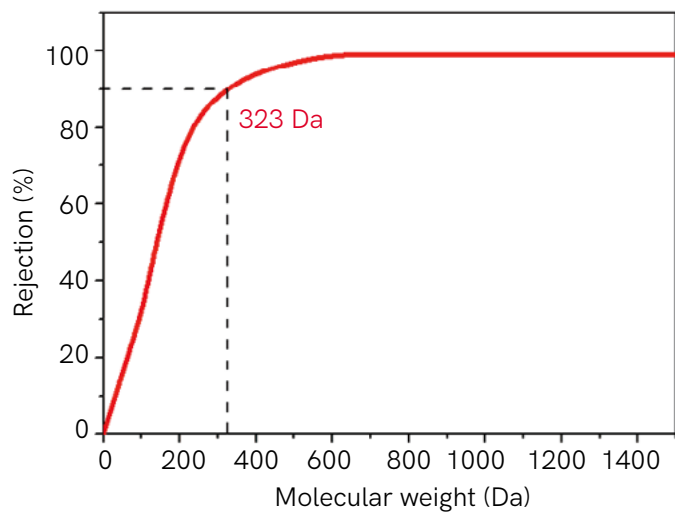
Advantages

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Wide range of membrane types
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Resistant to high temperatures and pH
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FDA Compliant Materials



MF (Microfiltration)

Membrane Model	Membrane materials	Pore size [µm]
MPS010	Polyethersulfone (PES)	0.1
MPV020	Polyvinylidene Flouride (PVDF)	0.2

UF (Ultrafiltration)

Membrane Model	Membrane materials	Nom. MWCO [kDa]
UPS005	Polyethersulfone (PES)	5
UPS010	Polyethersulfone (PES)	10
UPS020	Polyethersulfone (PES)	20
UPS100	Polyethersulfone (PES)	100
UPS150	Polyethersulfone (PES)	150
UPV080	Polyvinylidene Flouride (PVDF)	80

NF (Nanofiltration)

Membrane Model	Membrane materials	Rejection [%]
UNF90	Polyamide (PA)	≥ 98.5%
NFDK	Piperazinamide	≥ 98%
NFDL	Piperazinamide	≥ 97%
UNF454	Piperazinamide	≥ 92%
UNF604	Piperazinamide	≥ 60%

Test condition: 2000ppm MgSO₄, 7.6bar (110psi), 25°C (77 °F)

RO (Reverse Osmosis)

Membrane Model	Membrane materials	Stabilized Rejection [%]	Minimum Rejection [%]
BWFR	Polyamide (PA)	99.6% ⁽¹⁾	99.4% ⁽¹⁾
SWHR	Polyamide (PA)	99.8% ⁽²⁾	99.6% ⁽²⁾

(1) Test condition: 2000ppm NaCl, 15.5bar (225psi), 25°C (77 °F)

(2) Test condition: 32000ppm NaCl, 55bar (800psi), 25°C (77 °F)

Notes

- Membrane development according to customized requirements is available.
- Flat sheet membranes are available in rolls stock or sample sizes for testing purposes.
- Standard roll length is 300m.
- All flat sheets can be integrated into our UNISOL spiral wound modules.

WE SUPPORT YOU - WORLDWIDE!



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UNISOL MEMBRANE TECHNOLOGY reserves the right to change specifications without prior notification.
For the latest version, please refer to the internet. info@unisol-global.com
www.unisol-global.com | www.wta-unisol.com