****The only valid and up-to-date version of this datasheet, including all revisions and adjustments, is available on the UNISOL website.**

AMS FLAT SHEET MEMBRANES

Product Line	Stability	Membrane	Cut-off [Da]	pH Range	Pressure [bar] ([psi])	Temperature [°C] ([°F])	Typical Solutions
NanoPro™ (Nanofiltration)	1 Acid	A-3011	100	0 – 12	70 (1,015)	80 (176)	20% H_2SO_4 20% HCl 4% HNO_3 30% H_3PO_4 15% CH_3COOH
		A-3012	200	0 – 12	70 (1,015)	80 (176)	
		A-3014	400	0 – 12	40 (580)	80 (176)	
	2 Base (Alkali)	B-4021	100	3 – 14	60 (870)	60 (140)	20% NaOH 10% KOH
		B-4022	200	3 – 14	60 (870)	60 (140)	
		B-4024	400	3-14	40 (580)	60 (140)	
	3 Solvent	S-3011	100	2 – 12	70 (1,015)	60 (140)	Methanol, Ethanol, Propanol, Hexane, THF, Acetone, Acetonitrile, Ethyl acetate, DMF
		S-3012	200	2 – 12	70 (1,015)	60 (140)	
		S-3014	400	2 – 12	40 (580)	50 (122)	
UltraPro™ (Ultrafiltration)	4 Acid	A-U301	2,500	0 – 12	40 (580)	50 (122)	20% H_2SO_4 20% HCl 4% HNO_3 30% H_3PO_4 15% CH_3COOH
		A-1801	10,000	0 – 12	10 (145)	80 (176)	
	5 Solvent	S-U301	2,500	2 – 12	40 (580)	50 (122)	Methanol, Ethanol, Propanol, Hexane, THF, Acetone, Acetonitrile, Ethyl acetate, DMF
		S-1801	10,000	2 – 12	10 (145)	50 (122)	

* The maximum pressure and temperature are only applicable to the flat sheet membrane. For the peformance of membrane element please refer to the latest parameter datasheet.

1 NanoPro™ A-class

It is developed for long-term performance with high and stable fluxes in very acidic environment, featuring high pressure and temperature compatibility.

The elements are used for acid purification and metals concentration in low pH streams.

2 NanoPro™ B-class

It is developed for long-term performance with high and stable fluxes in a very base environment, featuring high pressure and temperature compatibility.

The elements are used for alkali purification and components concentration in high-pH streams.

3 NanoPro™ S-class

It is developed for long-term performance with high and stable fluxes in presence of solvents, featuring high pressure and temperature compatibility.

The elements are used for solvent purification and component concentration.

4 UltraPro™ A-class

It is developed for long-term performance with high and stable fluxes in very acidic environment, featuring high pressure and temperature compatibility.

The elements are used for either pre-filtration before nanofiltration or as stand-alone membranes in acid purification and metals concentration.

5 UltraPro™ S-class

It is developed for long-term performance with high and stable fluxes in presence of solvents, featuring high pressure and temperature compatibility.

The elements are used for either pre-filtration before nanofiltration or as stand-alone membranes in solvent purification and component concentration.

AMS membrane series is a result of decades of research and industrial operations. As the industries constantly change and evolve, so does the AMS series. Together with our customers we improve our product and explore tomorrow's applications: lithium to satisfy batteries demand, fertilizers to help phosphate crisis, pharmaceuticals to reduce R&D costs, chemicals to produce novel materials and composites.