

Title Preparation and Desalination of Semi-Aromatic Polyamide Reverse Osmosis Membranes (ROMs)

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Table S1. Comparison of NaCl rejection from the polyamide membranes fabricated via CPTC-MPD, and literatures reported membranes that are fabricated by TMC and MPD.

Membrane	NaCl Rejection (%)	Water flux ($\text{kg m}^{-2} \text{ h}^{-1}$)
ROM-3	97	56.1
CD-TFC-250	99.0 ± 0.3	22.2 ± 1.24
TFC-B	95.66 ± 0.12	22.7 ± 1.7
PIP-DHBA-DHBA	99.1 ± 0.2	46.04
ZIF-67/PA	99.28	45.57
PA-IL	99.2	30.7
PA-MMP _{0.05}	94.7	53.1
FBN-PA	97.8	62
TFC-1D-3	96.7 ± 1.1	38.44
TFN-Ns-0.06	96	71.3
TFC	97.7	47
PA/POSS	98	21.7
HPP-ZIF-8-RO	99	50
ROM-DEP-0.5	98.2	44.18
IPSA-3	99.2	43.09
TFC-M	98.9	45.32
KRO-1	99.6	10.9
DSC-DPPE	99.5 ± 0.1	40.3
pPa2CNs/PA	97.7	34.1
PMABSA/TMC	98.2 ± 0.4	18.29 ± 0.17
Ag-NPs	99.0 ± 0.2	26.35
RO-stress-rinse	99.39	48
GO-ZnO-RO	99.3	14.4
rGO/TiO ₂ /RO	99.45	51.3
TFN-GOQD/AP50	98.4	39.6

PA04 TFN	92.1	27
MWCNT/RO	97.8	28.9
L-0.2	99.03	42.63
0.1%-CNC-TFN	97.8	47.25 \pm 7.5
MoS2-TFN	92.9	98.6
DSC	99.1 \pm 0.6	31.8 \pm 1.9
CNC-TFC	99.1 \pm 0.2	23.25
IP@FI-0.05	96.0 \pm 1.9	40.35
mLbL ₁₅ -PA	98.7 \pm 0.3	20.7 \pm 3.7
TFC-pH10.3	99.4 \pm 0.1	37.2
TFN-ZIF-8	98.5 \pm 0.5	51.93
TMC/MPD mLbL	96.5	6.51
g-C3N4 NS PA/CN100	99.23	20.95
TFN MR-I	96	47
PA (nano zeolite)	~95	29.79
MPD/TMC	92.8	9.51
PPD/TMC	97	6.0
MPD/TMC	96	45
TFN-mGO	99.7	23.6
TFN	98.7	47.36
RO-PSbPDz	99	26.2
PA-GO	99.7	36.5
RO-Ti3C2Tx	98.5	39.22
PA-TFC-DMSO-0.3	99.4 \pm 0.2	46.5
TFC-6	97.8	42.63
RO-0.015	99.4	38.05
P(mPDTA)	98.2 \pm 0.6	23.0 \pm 4.8
PA/BHPF	95.07 \pm 0.35	41.08 \pm 1.1
PA-ZIF-8	98.6	40.5

XLE	92.6 ± 0.5	101.8 ± 1.4
NF 90	83.8 ± 0.3	125.4 ± 1.0
SW30HR	98.5 ± 0.2	9.0 ± 0.8
CPTC-TAEA	98.28	65.38
