Supplementary Materials:

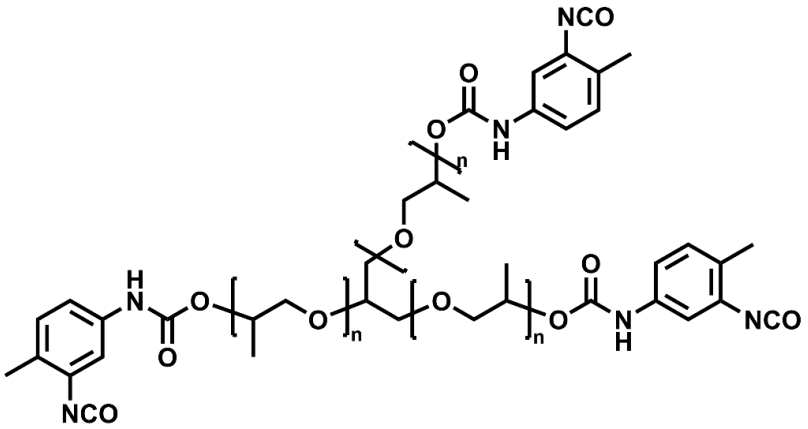

Figure S1. Chemical structure of PUR, a PPO-based polyurethane prepolymer (n= 20).

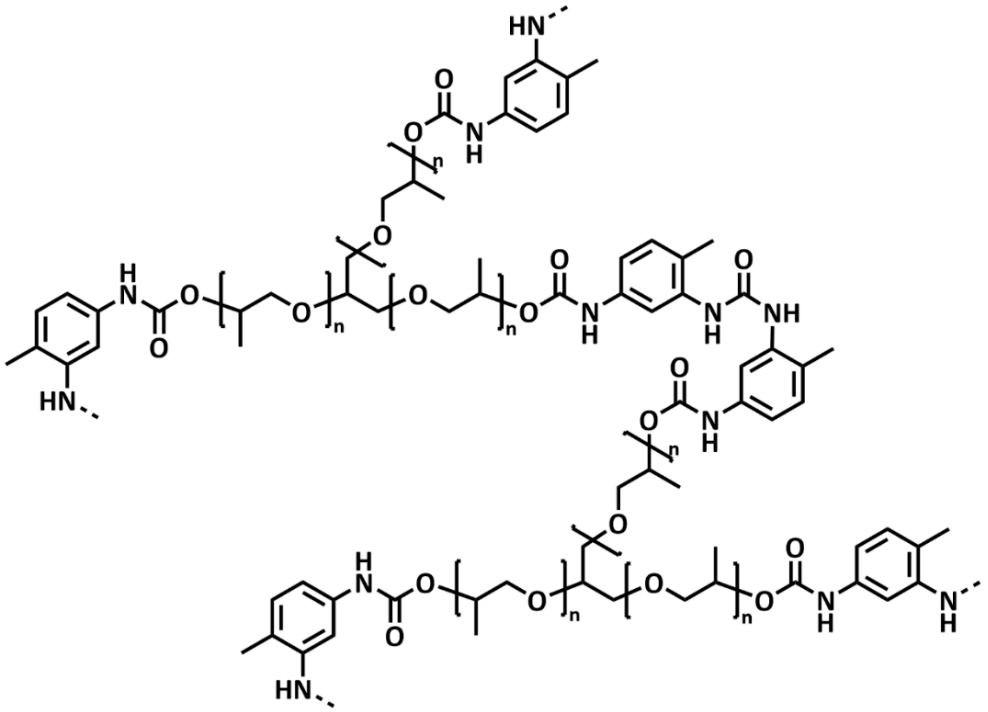

Figure S2. Probable chemical structure of the PU membranes (n= 20).

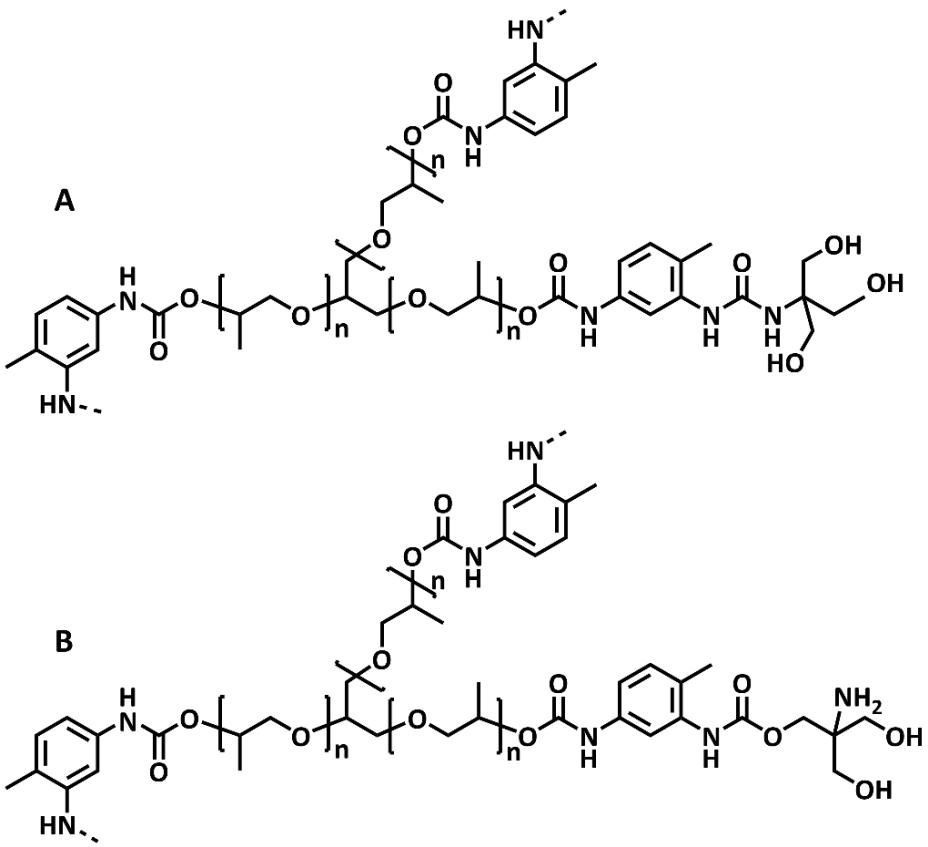

Figure S3. Possible chemical structures for the PU/TRIS membrane: reaction with the amine group (A) and reaction with an alcohol group (B).

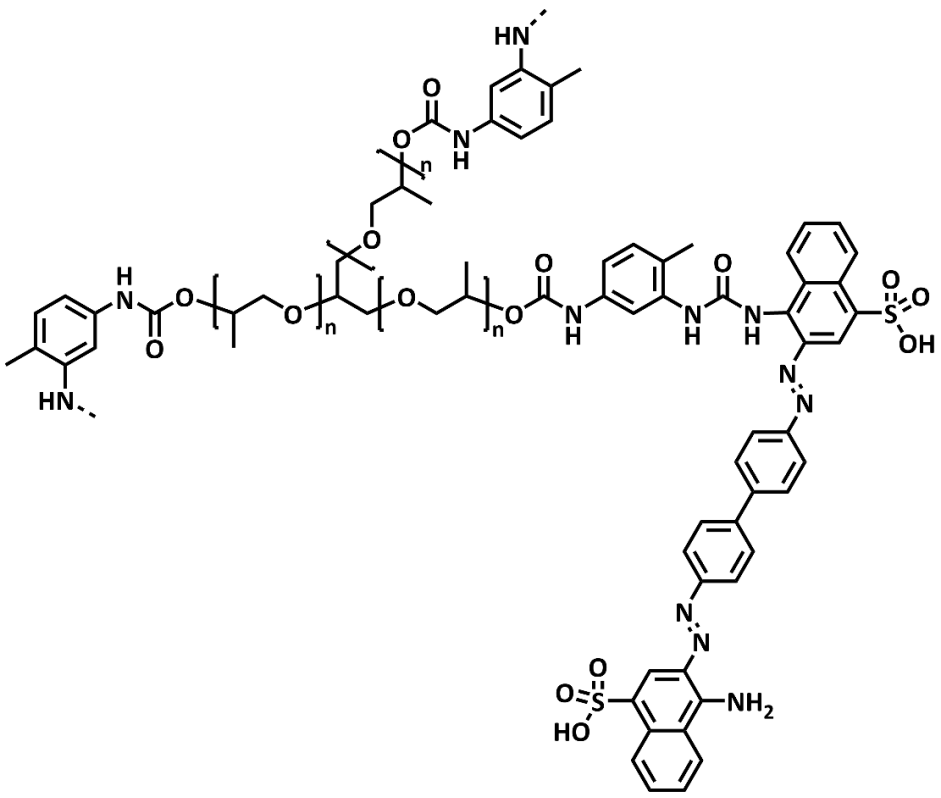

Figure S4. Chemical structure of the PU/CR membrane.

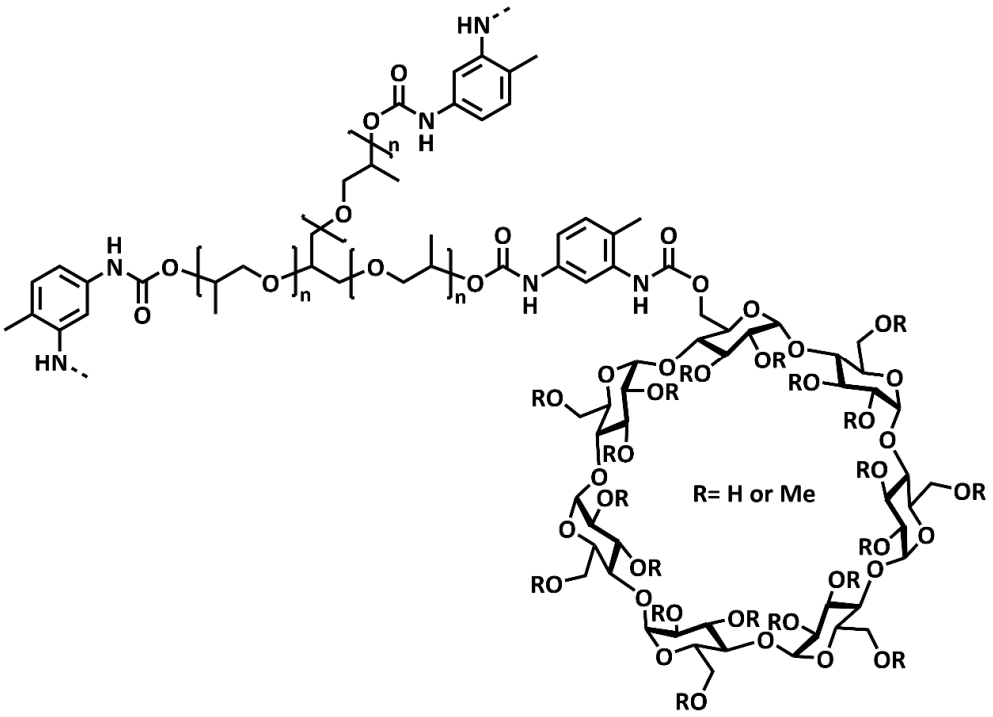

Figure S5. Chemical structure of the PU/MBCD membrane.

Table S1. Casting solution compositions of the PU/TRIS, PU/CR and PU/MBCD membranes.

	PUR (g)	TRIS (g)	CR (g)	MBCD (g)	DMF (mL)
PU/TRIS	9.92	0.08	-	-	4.54
PU/CR	9.96	-	0.04	-	4.54
PU/MBCD	9.96	-	-	0.04	4.54