

Automated Polymer Purification Using Dialysis

Supplementary information

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NMR spectra

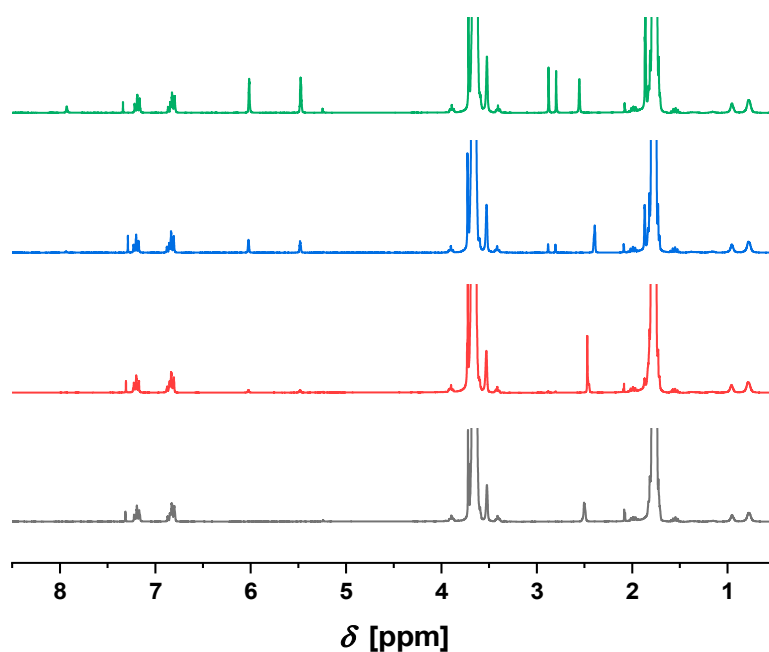


Figure S1: NMR kinetic (CDCl_3) of the manual dialysis **M2** (green 0 h, blue 3 h, red 9 h, black 24 h).

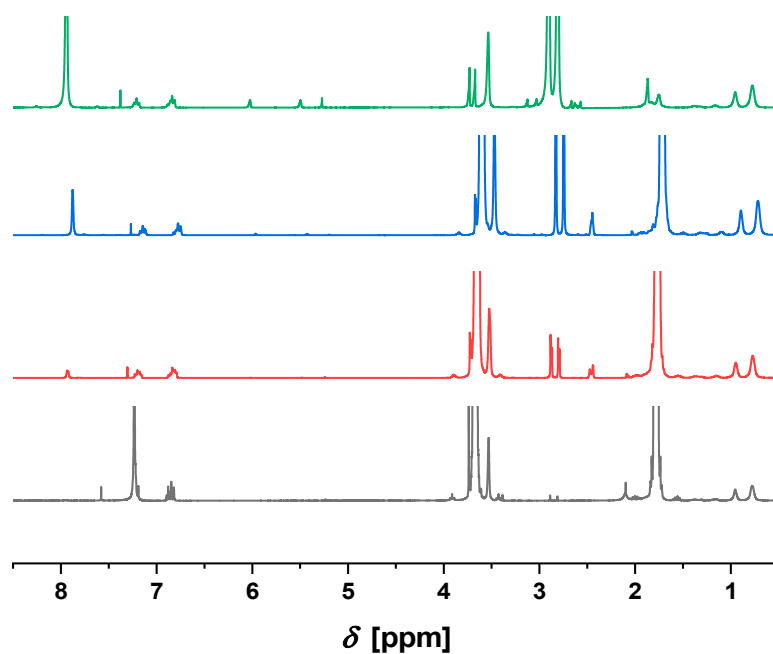


Figure S2: NMR kinetic (CDCl₃) of the manual dialysis **M3** (green 0 h, blue 3 h, red 9 h, black 24 h).

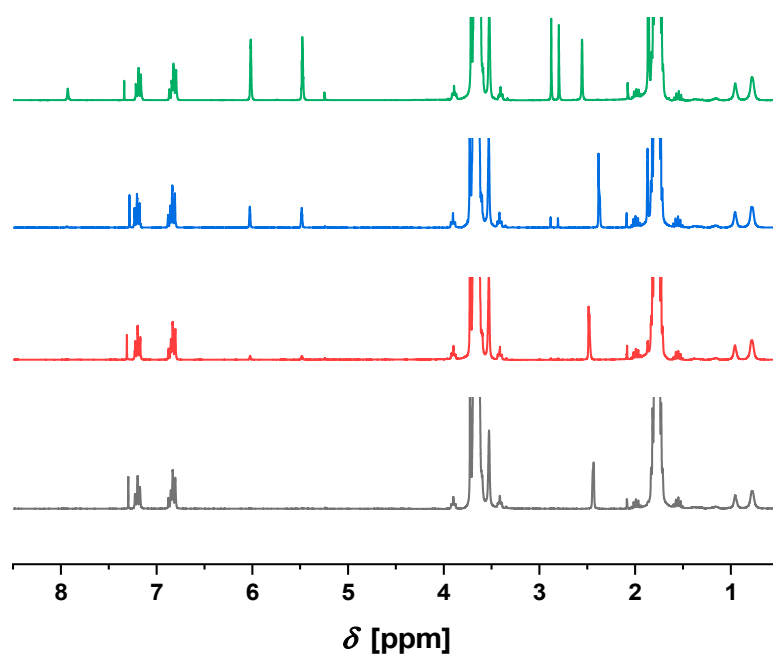


Figure S3: NMR kinetic (CDCl₃) of the automated dialysis **A2** (modus 1) (green 0 h, blue 3 h, red 9 h, black 24 h).

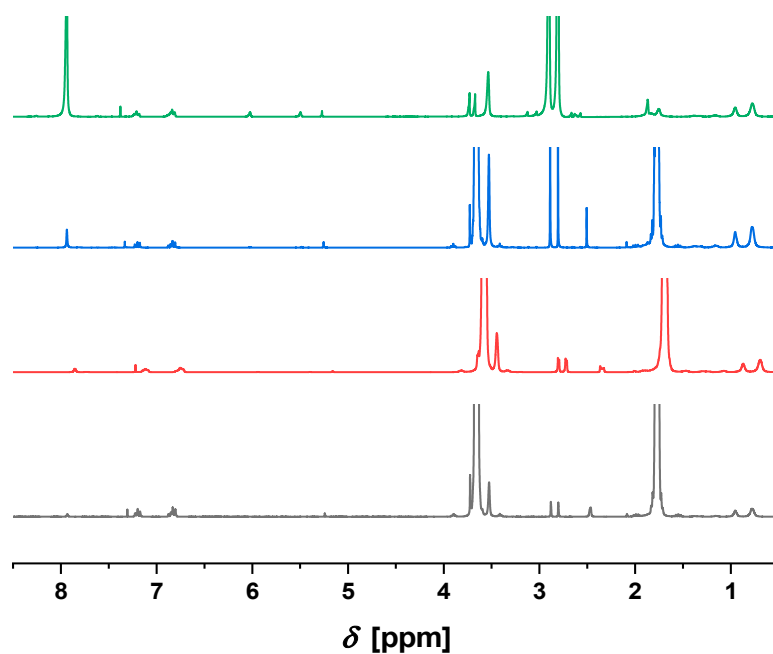


Figure S4: NMR kinetic (CDCl₃) of the automated dialysis A3 (modus 1) (green 0 h, blue 3 h, red 9 h, black 24 h).

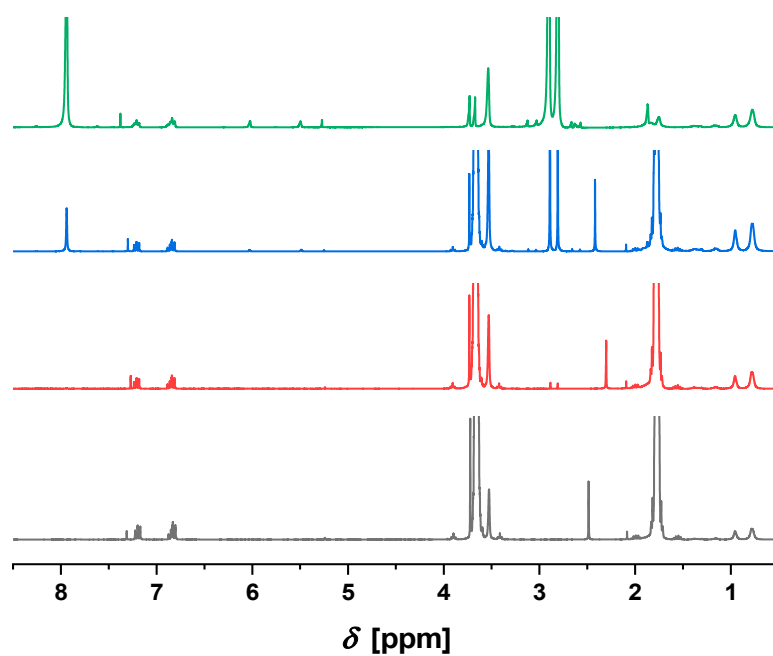


Figure S5: NMR kinetic (CDCl₃) of the automated dialysis A4 (modus 2) (green 0 h, blue 3 h, red 9 h, black 24 h).

SEC curves

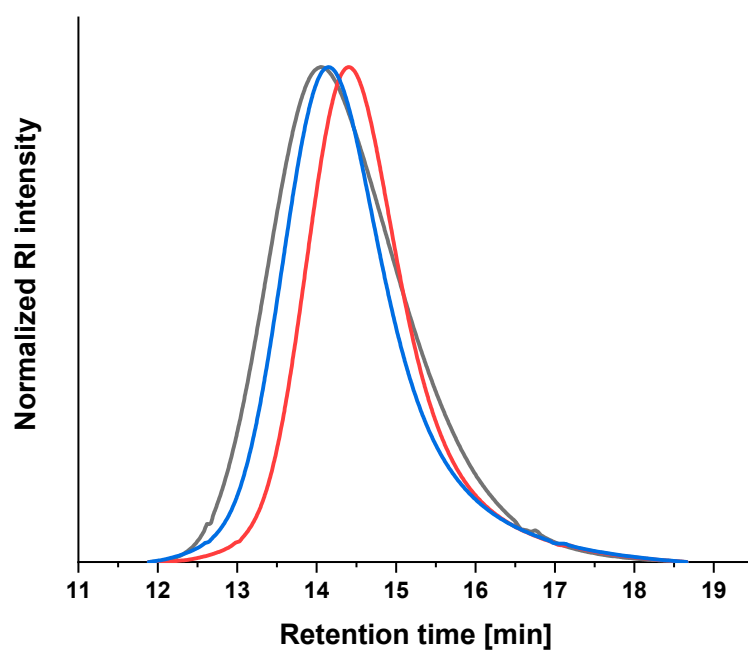


Figure S6: SEC curve of the polymer **P1** (blue), **P2** (red) and **P3** (black) (solvent: chloroform/isopropanol/triethyl-amine [94/2/4]).

Table S1: Details of the utilized standards for SEC-calibration. The listed molar masses (M_n) are molar mass at the peak maximum. The supplier of the standards is PSS GmbH.

Standard	Stock solution	Molar mass (M_n) of utilized standards
Polystyrene	1	1.040.000
		128.000
		18.100
		1.620
	2	659.000
		67.500
		9.130
		685
	3	246.000
		32.500

Poly(methyl methacrylate)		3.420
		374
	1	981.000
		110.000
		10.100
		1.102
	2	520.000
		49.000
		4.250
		505
	3	217.000
		23.300
		2.000
		102

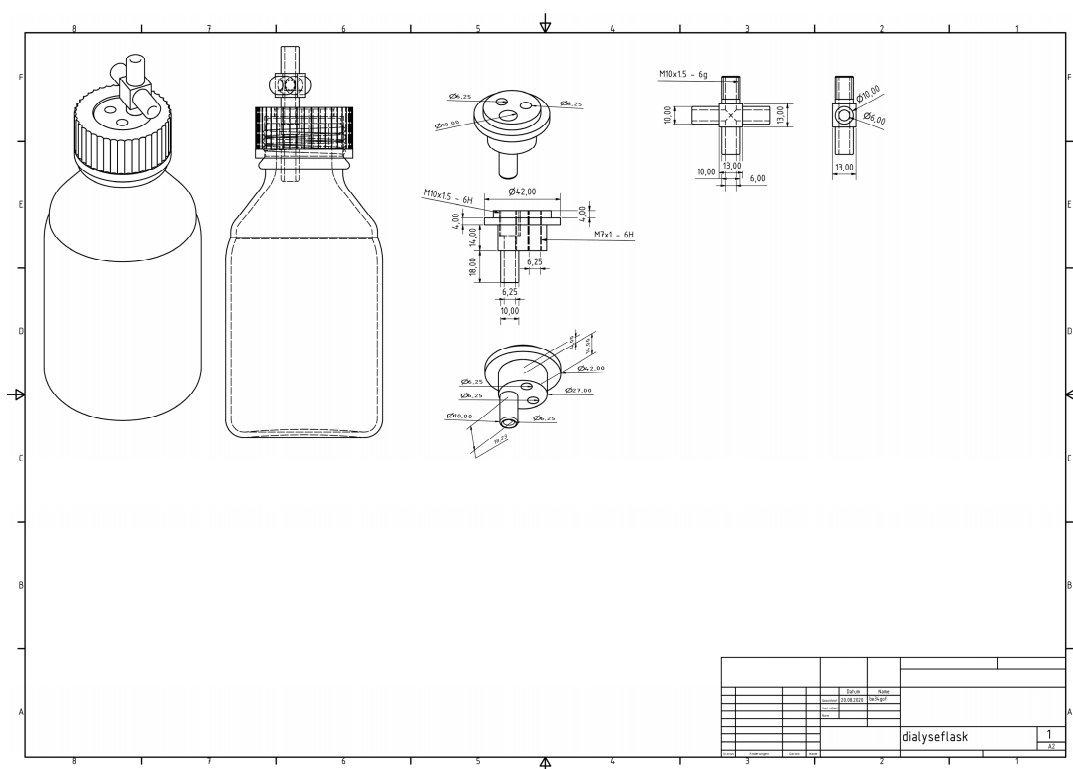


Figure S7: Schematic representation of the technical details of the dialysis apparatus.

Pictures of automated dialysis equipment

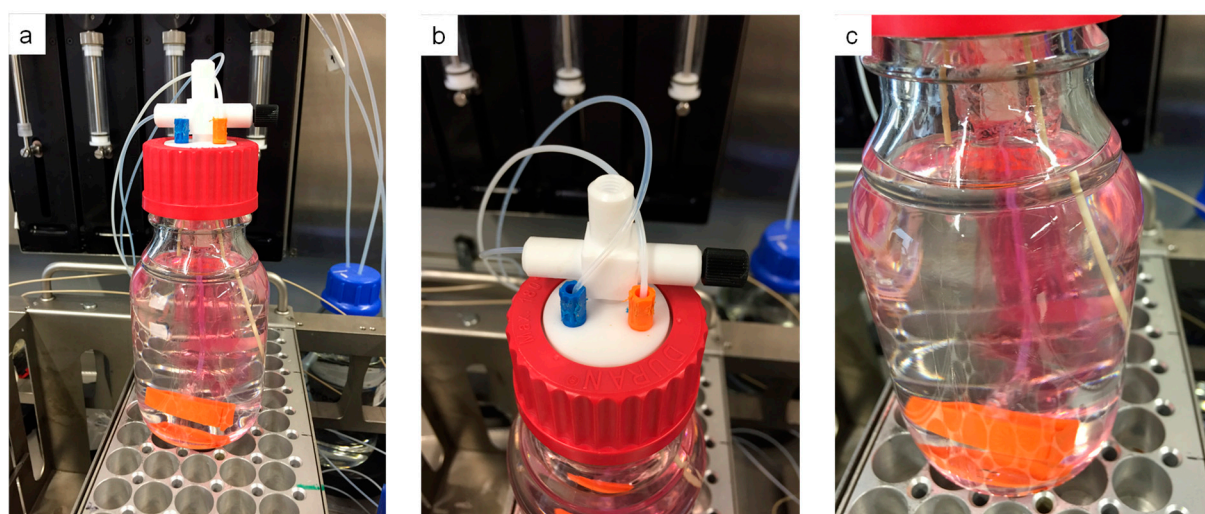


Figure S8: Automated dialysis equipment without pump (a: picture of the complete device; b: zoom in the injection port; c: zoom in the dialysis tube).

Pictures of dialysis M1

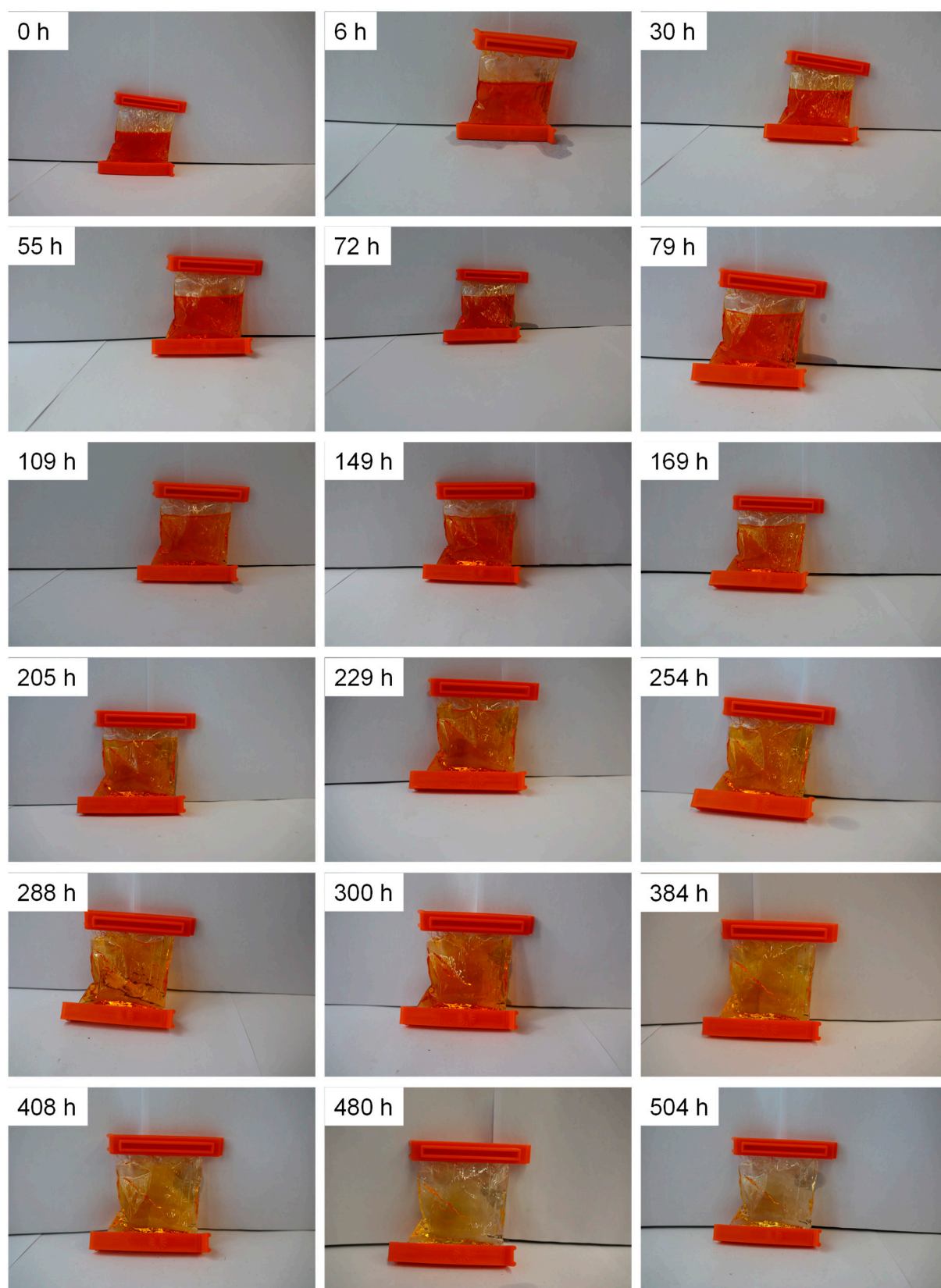


Figure S9: Overview of the manual dialysis using Sudan I as dye for the visualization. The solvent was changed every 12 h (400 mL each).

Pictures of dialysis A1

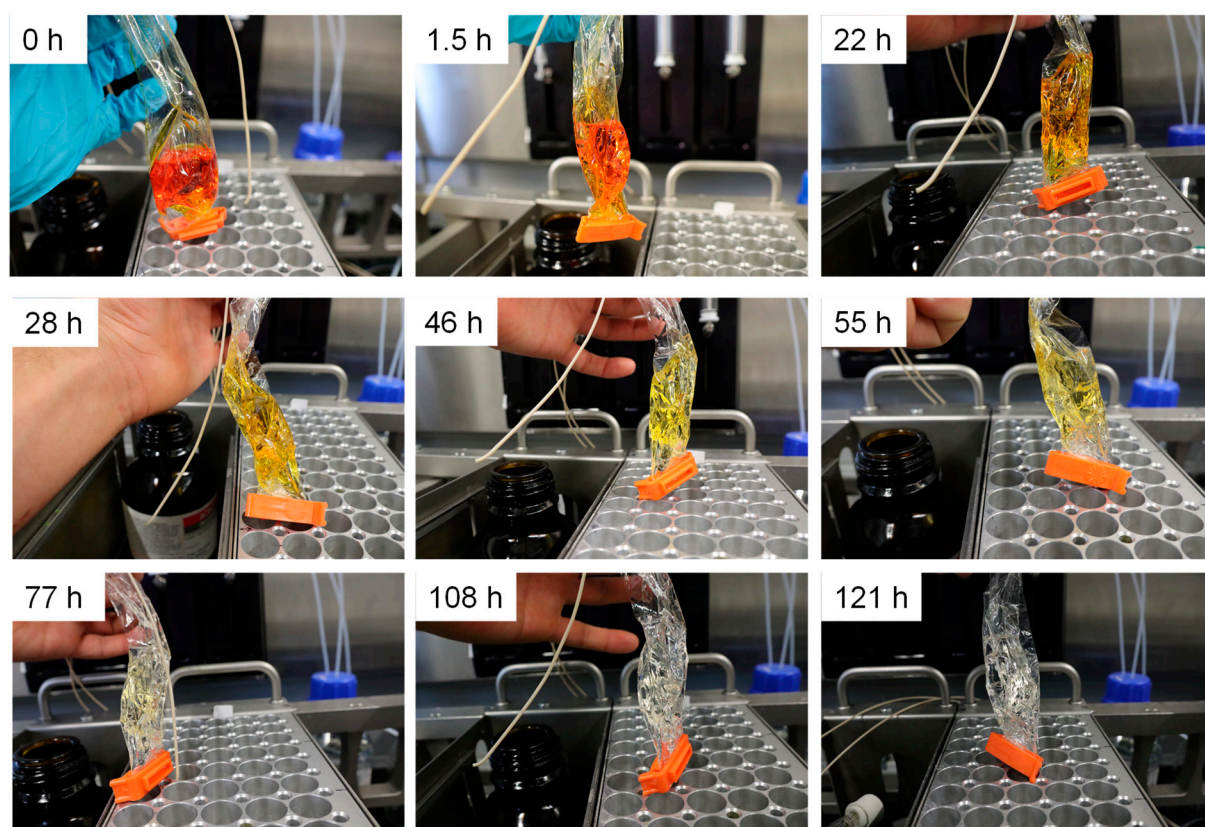


Figure S10: Overview of the automated dialysis using Sudan I as dye for the visualization. The solvent was changed continuously (35 mL/h).