

Supplementary Information

Additional Figures

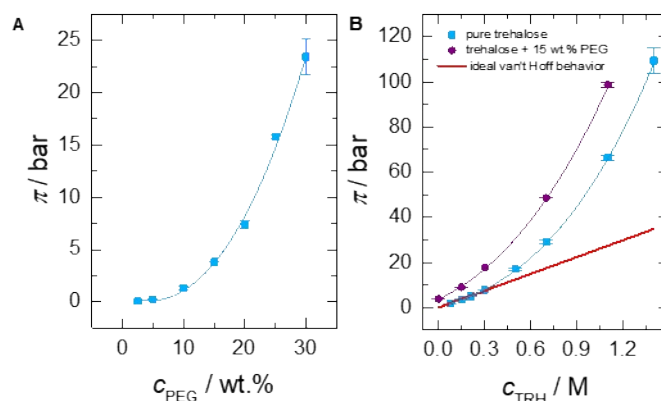


Fig. SI 1: Osmotic pressure of PEG (A) and trehalose (B) solutions at 35 °C. The red line indicates the ideal van't Hoff behavior, the blue and violet lines are shown as guides to the eyes only.

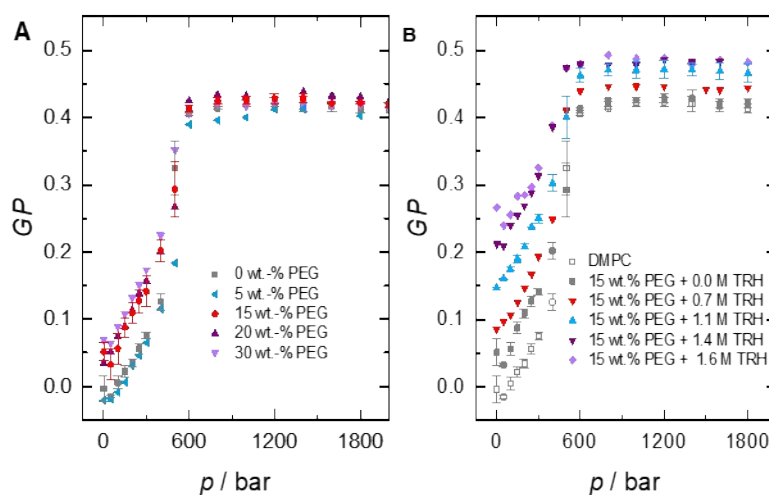


Fig. SI 2: Pressure ($T = 35^\circ\text{C}$) dependence of the Generalized Polarization of Laurdan incorporated into multilamellar DMPC vesicles in the absence and presence of PEG and trehalose.

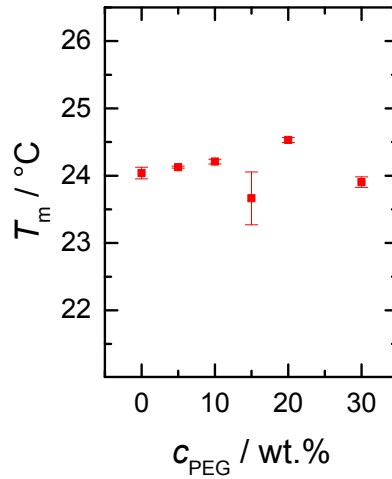


Fig. SI 3: Influence of PEG on the temperature-induced gel-to-fluid phase transition, derived from the DSC data.

Additional Tables

Table SI 1: Mean deviation of the Caillé analysis of the data at 35 °C and 1 bar obtained at the SAXSess mc² instrument.

	DMPC	DMPC + 0.15 M TRH	DMPC + 20 wt.% PEG
sample 1	1.17	2.18	3.61
sample 2	0.983	2.03	1.65
sample 3	1.28	2.64	1.13

Table SI 2: Mean deviation of the Caillé analysis of the data at 35 °C and 1 bar obtained at beamline ID02 of the ESRF.

	DMPC	DMPC + 0.15 M TRH	DMPC + 15 wt.% PEG
sample 1	0.440	0.241	0.138
sample 2	0.433	0.136	0.136