Equilibration of samples

We performed an osmotic stress experiment to investigate how long it takes for the DNA-C₄K₁₂ complexes to equilibrate against a PEG solution. We plotted the distances between the DNA backbone as a function of the number of days the sample has been equilibrated (Figure 1). Using SAXS we found that intermolecular spacing remain constant, for different PEG concentration, for ~1 month period. In Figure 1 we checked the equilibration time for two different PEG concentrations, namely 15 and 25wt% of PEG. Importantly, after 1 day the DNA-C₄K₁₂ appeared to reach equilibrium.

![Figure 1: The distance between the DNA-bottlebrushes as a function of the number of days the samples were equilibrated in a PEG solution. The black data point represent samples equilibrated against 15 wt% and the red data points were equilibrated against 25 wt% of 20 kDa PEG solution. Each sample equilibrated to a 25 wt% PEG solution became birefringent and all the samples equilibrated to a 15 wt% PEG solution were not birefringent.](image-url)