

# Electronic Supplementary Information

## DMPC vesicle structure and dynamics in the presence of low amounts of the saponin aescin

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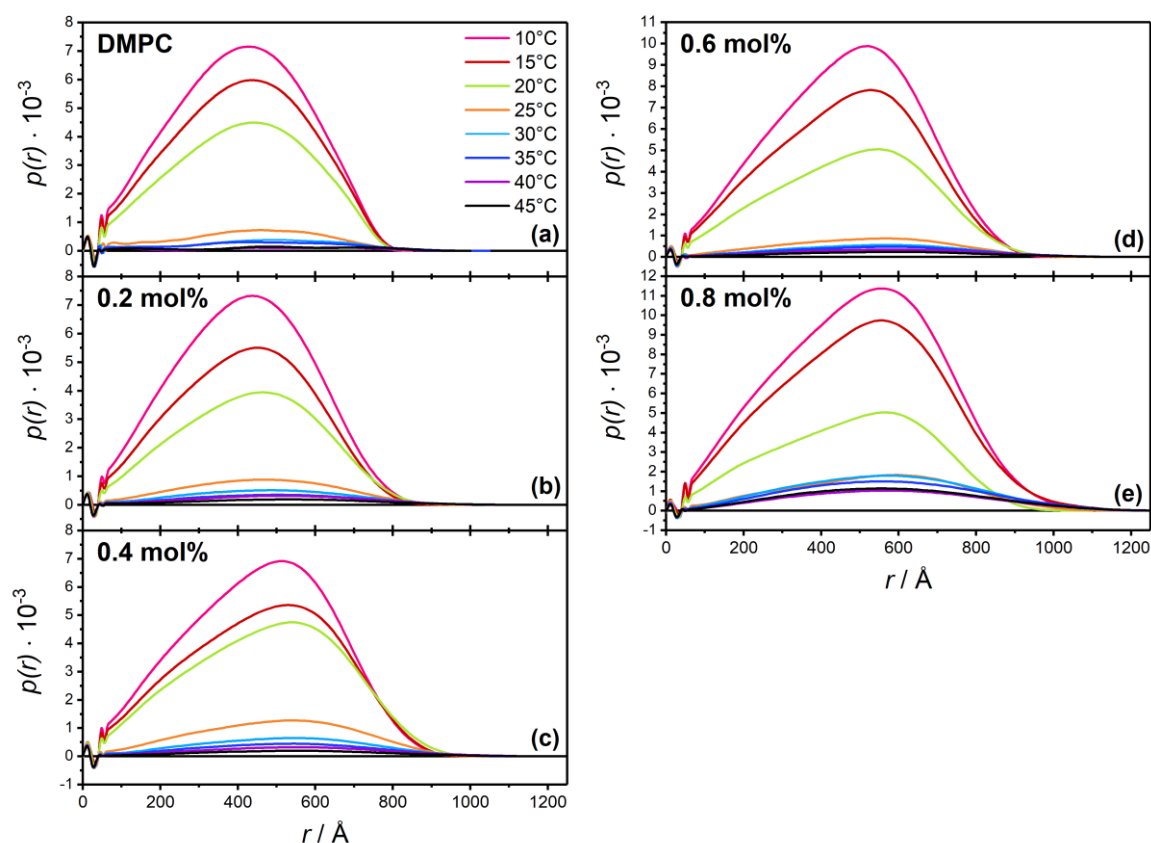
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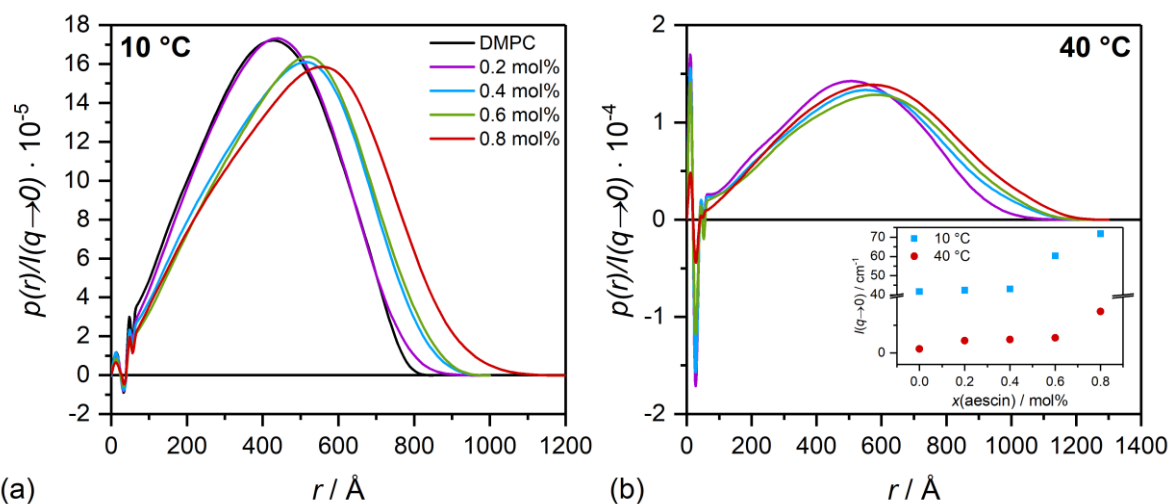
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### Pair distance distribution functions from SAXS

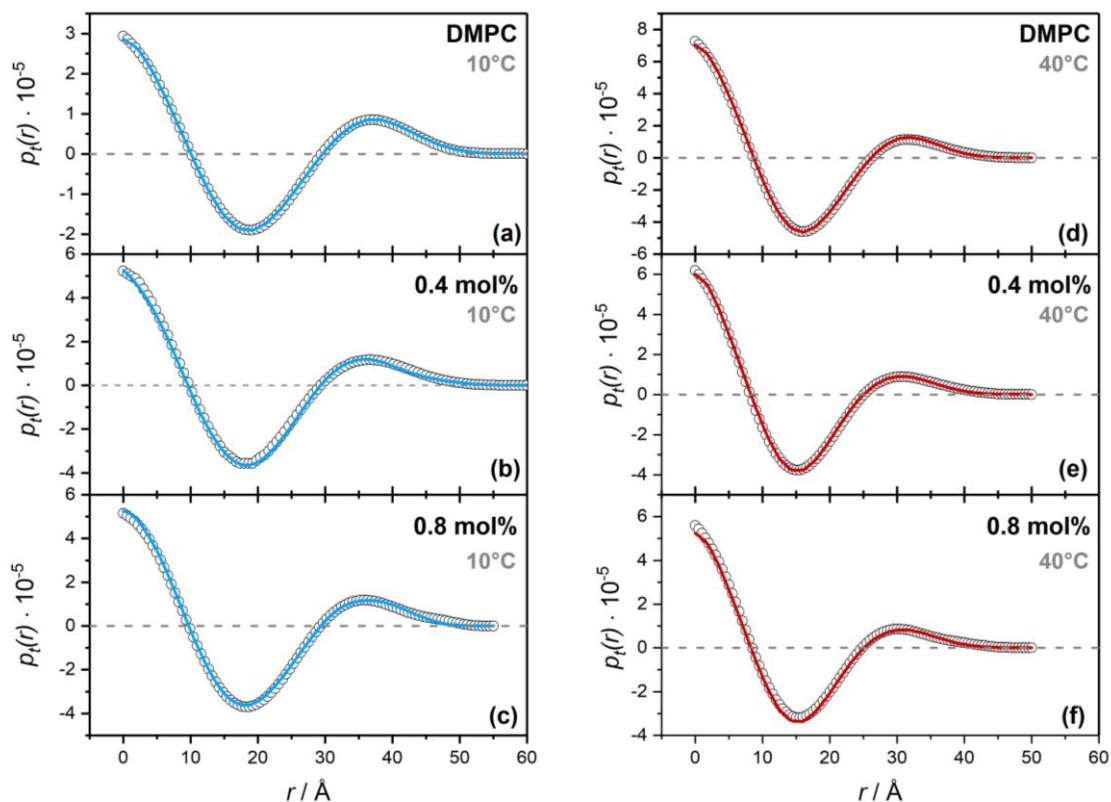


**Figure S1** : Pair distance distribution functions ( $p(r)$ ) of vesicle suspensions of (a) DMPC and (b)-(e) DMPC containing low amounts of aescin in the temperature range between 10 °C and 45 °C in steps of 5 °C. They were obtained from a standard IFT analysis using GIFT.<sup>1</sup>



**Figure S2:** Pair distance distribution functions ( $p(r)$ ) of vesicle suspensions of DMPC and DMPC containing low amounts of aescin at 10 °C and 40 °C. These functions were normalized by the intensity at  $q \rightarrow 0$ . The evolution of the  $l(q \rightarrow 0)$  with aescin content is shown in the inset of panel (b).

### Thickness pair distance distribution functions from SAXS



**Figure S3:** Thickness pair distance distribution functions ( $p_t(r)$ ) (circles) for vesicle suspensions of DMPC and DMPC containing low amounts of aescin at (a)-(c) 10 °C and (d)-(f) 40 °C.  $p_t(r)$  functions were obtained using GIFT.<sup>1</sup> Solid lines represent the calculated  $p_t(r)$  functions by DECON for deconvolution and calculation of the ED profiles ( $\Delta\rho$ ) in Fig. 9 in the manuscript.<sup>2</sup>

### References

- (1) Bergmann, A.; Fritz, G.; Glatter, O. *Journal of Applied Crystallography* 2000, 33, 1212-1216.
- (2) Mittelbach, R.; Glatter, O. *Journal of Applied Crystallography* 1998, 31, 600-608.