

Supporting Information (SI)

Molecular dynamics of dilute binary chromonic liquid crystals mixtures

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Table S1. Summary of average stacking distance between chromonic pairs for Disodium cromoglycate (DSCG) and Bordeaux Dye (BD) mixture. All chromonic pairs were numbered in descending order as they appear in Figure 2.

Chromonic π-interaction	Pair number	Stacking distance (nm)
BD-BD	1	0.34 ± 0.02
	2	0.34 ± 0.01
DSCG-DSCG*	1	0.35 ± 0.07
	2	0.35 ± 0.08
DSCG-BD	1, 2	0.34 ± 0.05
	3	0.34 ± 0.04

* DSCG-DSCG average stacking distances were calculated individually for each aromatic pair and later averaged over both stacking axes. Averaging for DSCG-DSCG pair #1 took place between 0-12 ns and 63-78 ns of the simulation run.

Table S2. Summary of average stacking distance between chromonic pairs for Sunset Yellow FCF (SSY) and Bordeaux Dye (BD) mixture. All chromonic pairs were numbered in descending order as they appear in Figure 3.

Chromonic π-interaction	Pair number	Stacking distance (nm)
SSY-SSY	1	0.34 ± 0.04
BD-BD	1, 2, 3	0.34 ± 0.02
SSY-BD	1	0.34 ± 0.02
	2	0.34 ± 0.03

Table S3. Summary of average stacking distance between chromonic pairs for SSY and DSCG mixture. All chromonic pairs were numbered in descending order as they appear in Figure 3.

Chromonic π-interaction	Pair number	Stacking distance (nm)
DSCG-DSCG axis \hat{m}	1, 2, 3	0.34 ± 0.03
DSCG-DSCG axis \hat{n}	1, 2, 3	0.35 ± 0.03
SSY-DSCG* axis \hat{m}	1	0.35 ± 0.07
SSY-DSCG* axis \hat{n}	1	0.36 ± 0.09

* SSY-DSCG average stacking distances were computed when both chromonic species were forming a π -interaction (which are indicated with a dashed-line in Figure 9).