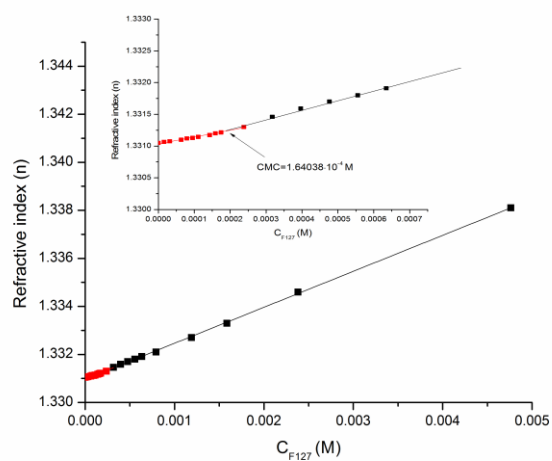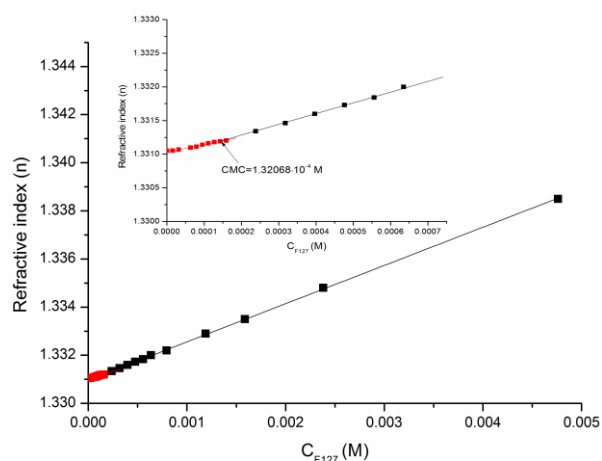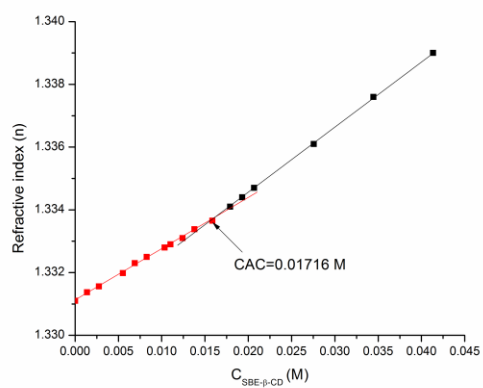**Supplementary Material**

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Figure S1. Refractive index vs. concentration of F127 pure (a), F127 in the presence of CBZ (b), SBE-β-CD pure (c), and SBE-β-CD in the presence of CBZ (d) at 37 °C.
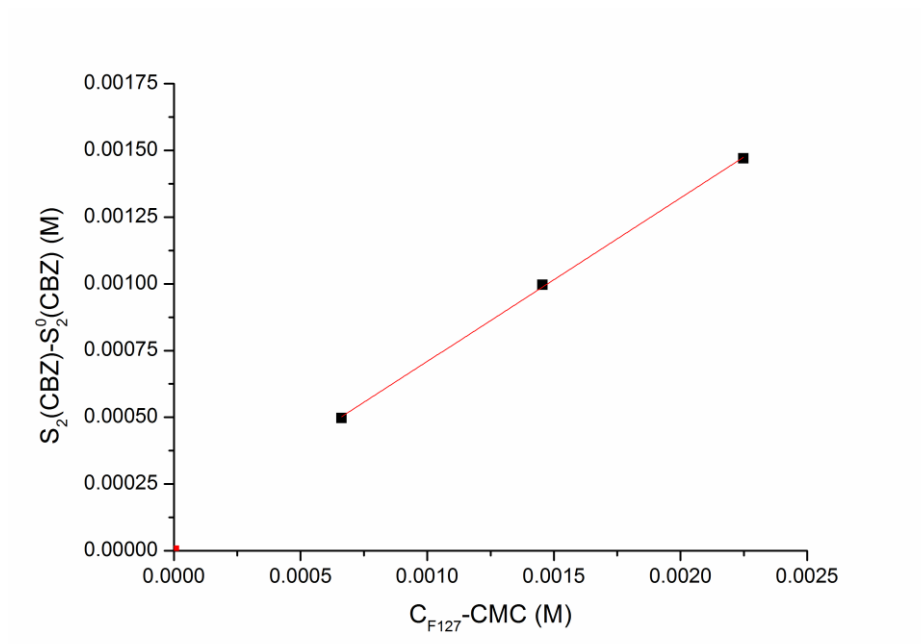
Figure S2. Plot of $(S_2(CBZ) - S_2^0(CBZ))$ on $(C_{F-127} - CMC)$ dependence at different concentrations of F-127 in buffer pH 6.8, 37 °C.
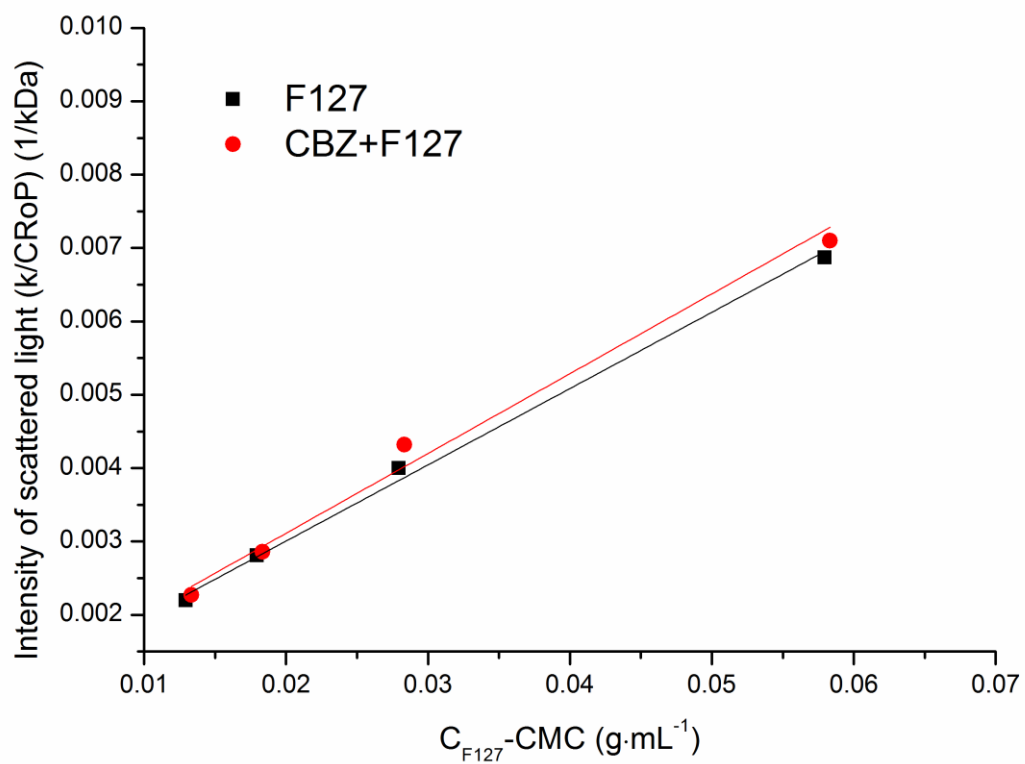
Figure S3. Debye-plots for systems of F-127 (black squares) and F127+CBZ (red circles) in buffer pH 6.8.
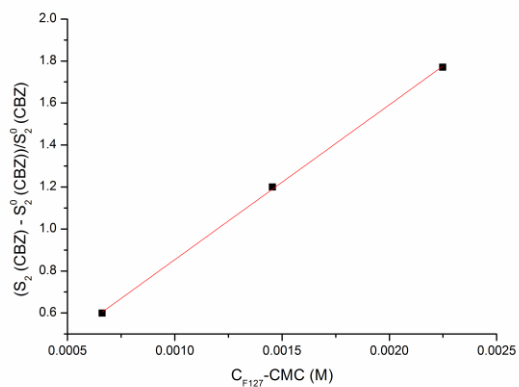
(a)
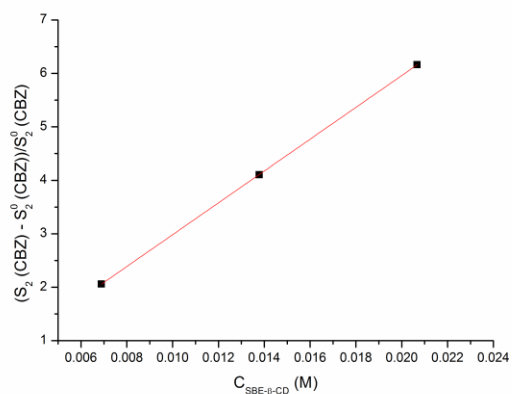
(b)
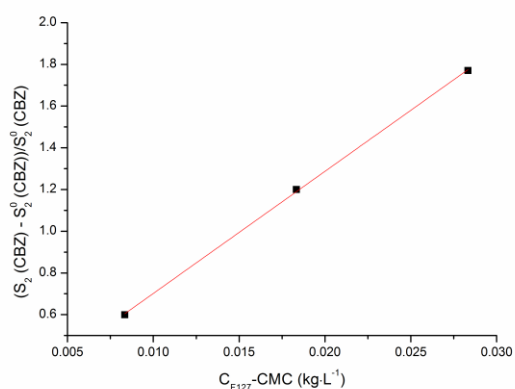
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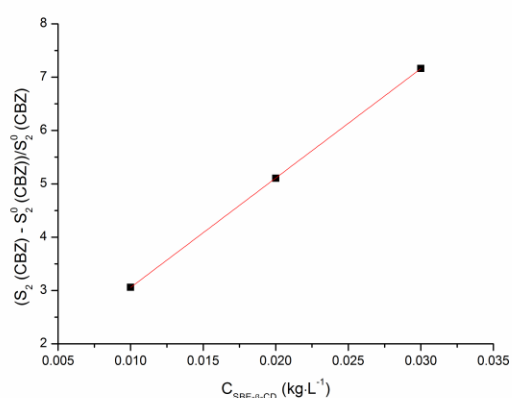
(d)

Figure S4. Plots of $(S_2(CBZ) - S_2^0(CBZ))/S_2^0(CBZ)$ on (C_{F127}-CMC) (a,c) and $C_{SBE-\beta-CD}$ (b,d) dependences used for the F127/buffer and SBE-β-CD/buffer partition coefficients calculation (a) and (b) - from molar concentrations, (c) and (d) - from the concentrations expressed in kg·L^{-1} units; 37 °C.

Table S1. Solubility of CBZ at 37.0±0.1ºC.

F-127concentration (mmol·L⁻¹)	Solubility in buffer pH 6.8+F-127 (mol·L⁻¹)	SBE-β-CD concentration (mmol·L⁻¹)	Solubility in buffer pH 6.8+SBE-β-CD (mol·L⁻¹)
0	$(8.30\pm0.14)\cdot10^{-4}$	0	$(8.30\pm0.14)\cdot10^{-4}$
1.33	$(1.33\pm0.05)\cdot10^{-3}$	6.89	$(2.54\pm0.06)\cdot10^{-3}$
1.83	$(1.83\pm0.06)\cdot10^{-3}$	13.78	$(4.24\pm0.11)\cdot10^{-3}$
2.30	$(2.30\pm0.08)\cdot10^{-3}$	20.67	$(5.95\pm0.14)\cdot10^{-3}$

Table S2. Free fraction (f_{free}) of CBZ at different excipient concentrations.

F-127concentration (mmol·L⁻¹)	Free fraction of CBZ	SBE-β-CD concentration (mmol·L⁻¹)	Free fraction of CBZ
0	1	0	1
1.33	0.647	6.89	0.288
1.83	0.454	13.78	0.168
2.30	0.350	20.67	0.119

Table S3. Donor solution concentrations (C_0) and steady state flux (J) of CBZ in pure buffer pH 6.8 and in F127 and SBE-β-CD solutions at 37 ºC.

$C_{exipient}$ (mmol·L⁻¹)	Initial parameters of the permeation experiments	
	C_0 (mol·L⁻¹)	J (µM·cm⁻²·s⁻¹)
	RC	
0	$5.95\cdot10^{-4}$	$3.31\cdot10^{-5}$
	F127	
1.33	$7.31\cdot10^{-4}$	$2.36\cdot10^{-5}$
1.83	$8.31\cdot10^{-4}$	$2.21\cdot10^{-5}$
2.30	$1.350\cdot10^{-3}$	$2.75\cdot10^{-5}$
	SBE-β-CD	
6.89	$1.55\cdot10^{-3}$	$3.19\cdot10^{-5}$
13.78	$2.31\cdot10^{-3}$	$3.09\cdot10^{-5}$
20.67	$4.71\cdot10^{-3}$	$5.85\cdot10^{-5}$
	PDS	
0	$4.97\cdot10^{-4}$	$2.82\cdot10^{-7}$
	F127	
1.33	$7.18\cdot10^{-4}$	$2.05\cdot10^{-7}$
1.83	$8.31\cdot10^{-4}$	$2.10\cdot10^{-7}$
2.30	$8.92\cdot10^{-4}$	$1.91\cdot10^{-7}$
	SBE-β-CD	
6.89	$1.53\cdot10^{-3}$	$1.94\cdot10^{-7}$
13.78	$3.06\cdot10^{-3}$	$2.43\cdot10^{-7}$
20.67	$4.21\cdot10^{-3}$	$2.38\cdot10^{-7}$

Table S4. Viscosity of the donor solutions at 37 ºC.

F-127concentration (mmol·L⁻¹)	Viscosity (MPa)	SBE-β-CD concentration (mmol·L⁻¹)	Viscosity (MPa)
0	0.71	0	0.71
1.33	0.84	6.89	0.72
1.83	0.88	13.78	0.75
2.30	1.09	20.67	0.80