

S1 Table. Parameters of density-dependent reaction kinetics.

Quantity	Symbol	Value	Unit
Thermal energy	$k_B T$	2.49	kJ mol^{-1}
Volume	V	100^3	nm^3
Radius A	r_A	1	nm
Radius B	r_B	0.8	nm
Radius C	r_C	1	nm
Diffusion coeff. A	D_A	0.01	$\text{nm}^2 \text{ns}^{-1}$
Diffusion coeff. B	D_B	0.0125	$\text{nm}^2 \text{ns}^{-1}$
Diffusion coeff. C	D_C	0.01	$\text{nm}^2 \text{ns}^{-1}$
Charge A	q_A	1.3	–
Charge B	q_B	–1	–
Charge C	q_C	0	–
Screening parameter	κ	3.82	nm^{-1}
Debye-Hückel prefactor	$e^2 \epsilon_0^{-1} \epsilon_r^{-1}$	2349	kJ nm mol^{-1}
Repulsion energy	U_r	1.	kJ mol^{-1}
Cutoff radius	r_{cutoff}	4.7	nm
Reaction radius	R	2.	nm
Equilibrium constant	K_{dilute}	6.16×10^{-5}	nm^{-3}
Macroscopic rate constant	k_{on}	0.11	$\text{nm}^3 \text{ns}^{-1}$
Macroscopic rate constant	k_{off}	6.58×10^{-6}	ns^{-1}
Microscopic rate constant	λ_{on}	5.61×10^{-3}	ns^{-1}
Microscopic rate constant	λ_{off}	6.58×10^{-6}	ns^{-1}
Timestep	τ	0.1	ns

This table contains parameters for the Debye-Hückel system in the results section.