

Thin Cationic Polymer Coatings against Foodborne Infections

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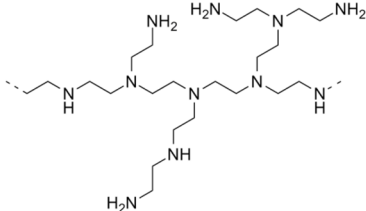
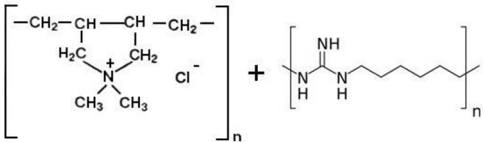
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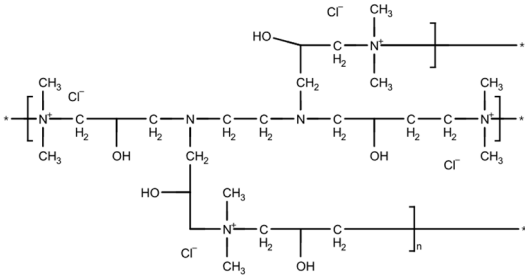
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Table S1. Polymers used in this work.

Abbr.	Polymer	Formula	Manufacturer	Mw
CP1	Polyethyleneimine	 CAS Number 9002-98-6	Sigma-Aldrich	750 000
CP2	Polyallylamine	$\left(\begin{array}{c} -\text{CH}_2-\text{CH}- \\ \\ \text{CH}_2 \\ \\ \text{NH}_2 \end{array} \right)_n \cdot \text{HCl}$ CAS Number 71550-12-4	Sigma-Aldrich	17 500
CP3	Mixture of polydiallyldimethylammonium chloride and polyhexamethylene-guanidine (1/1)	 CAS Number 26062-79-3 CAS Number 31961-54-3	Sigma-Aldrich (initial polymers)	N/A

CP4	Copolymer of dialyldimethylammonium chloride and SO ₂ (1/1)	$\left[\begin{array}{c} -\text{CH}_2-\text{CH}-\text{CH}-\text{CH}_2-\text{SO}_2- \\ \quad \\ \text{H}_2\text{C} \quad \text{CH}_2 \\ \quad \\ \text{N}^+ \\ \quad \\ \text{CH}_3 \quad \text{CH}_3 \end{array} \right]_n \text{Cl}^-$	Tekhnolog (Russia)	N/A
Russian product specifications 24-82-033-00209295-99				
CP5	Dimethylamine-epichlorohydrin linear copolymer (1/1)	$\left(\begin{array}{c} \\ -\text{N}^+-\text{CH}_2-\text{CH}-\text{CH}_2- \\ \quad \\ \text{Cl}^- \quad \text{OH} \end{array} \right)_n$	BSC Chemicals (Russia)	Low molecular weight
CAS Number 25988-97-0				
CP6	Polydiallyldimethylammonium chloride	$\left[\begin{array}{c} -\text{CH}_2-\text{CH}-\text{CH}-\text{CH}_2- \\ \quad \\ \text{H}_2\text{C} \quad \text{CH}_2 \\ \quad \\ \text{N}^+ \\ \quad \\ \text{CH}_3 \quad \text{CH}_3 \end{array} \right]_n \text{Cl}^-$	Sigma-Aldrich	450 000
CAS Number 26062-79-3				
CP7	Dimethylamine-epichlorohydrin hyperbranched copolymer		SNF-EAST (Russia)	855 000
CAS Number 25988-97-0				

The optical images of films of the polycations on the glass substrate were obtained using Altami Lum 1 LED (Altami, Russia) microscope with a Canon photocamera (Canon, Japan). The typical image of polymer film before and after wash-off cycle is presented on Figure S1.

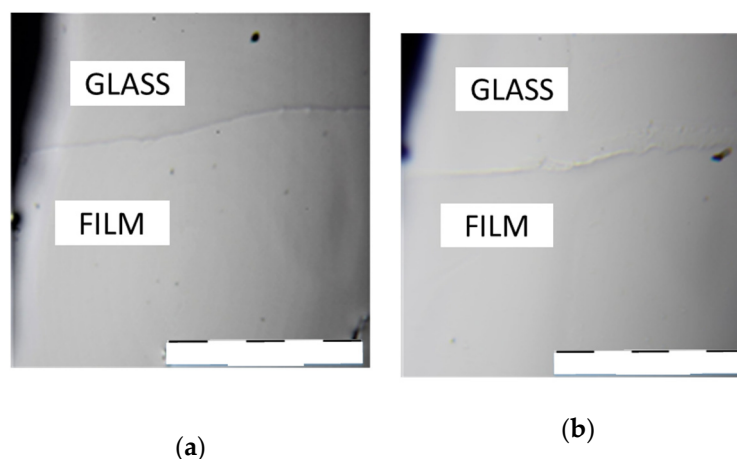


Figure S1. Image of CP1 film on the glass substrate after formation of the coating (a) and after wash-off (b). The scale bar is 150 μm .

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