

Supplementary material for the article:

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**Study of the Properties of Urethane-Siloxane Copolymers based on
Poly(propylene oxide)-*b*-poly(dimethylsiloxane)-*b*-poly(propylene oxide)
Soft Segments**

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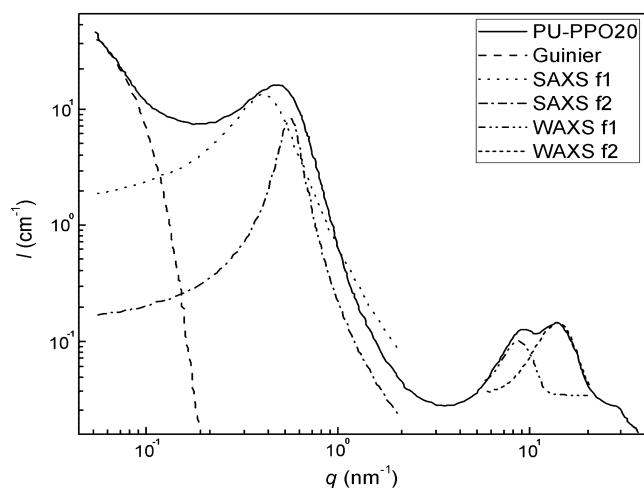


Figure S1. Example of fitting of the peaks

It has been possible to fit five functions: Guinier, two Lorentz in SAXS and two Gauss in WAXS regions. An example fit is in the Figure S1 and relevant parameters and values, their meaning and behavior with increasing hard segment content are in the following tables (Table S1 and Table S2).

Table S1. SAXS and WAXS results of the PURs

Sample	IO	Rg	A1	C1	T1	A2	C2	T2	RS	H1	P1	HW1	H2	P2	HW2	RW	H1/2
PU-PPO10	65.8	28.9	7.92	0.35	0.14	8.22	0.53	0.11	8.2	0.0689	8.42	1.25	0.156	13.0	3.66	3.48	0.44
PU-PPO20	62.9	29.6	11.1	0.37	0.14	7.00	0.52	0.08	6.9	0.0716	8.53	1.42	0.115	13.7	2.79	0.74	0.62
PU-PPO40	65.2	32.0	20.2	0.43	0.09	2.93	0.58	0.10	3.2	0.0490	8.51	1.11	0.127	14.0	2.74	1.51	0.39
PU-PPO50	53.2	27.7	23.6	0.37	0.09	5.42	0.55	0.08	10.2	0.0419	8.40	1.13	0.123	14.0	2.81	1.85	0.34
PU-PPO60	89.0	30.4	20.7	0.37	0.09	4.26	0.53	0.10	3.5	0.0311	8.41	0.92	0.127	14.2	2.73	2.96	0.24

Table S2. The parameters, their meaning and behavior with increasing hard segment content in the PURs

The parameters	The meaning	The behavior with increasing hard segment content
IO	Zero intensity	unclear
Rq	Radius of gyration	unclear
A1	Amplitude of the 1st SAXS peak	clearly grows
C1	Position of the 1st SAXS peak	roughly same D ~ 17 nm
T1	Thickness of the 1st SAXS peak	roughly same
A2	Amplitude of the 2nd SAXS peak	slightly decreases
C2	Position of the 2nd SAXS peak	roughly same D ~ 11 nm
T2	Thickness of the 2nd SAXS peak	roughly same
RS	Quality of the SAXS fit	
H1	Amplitude of the 1st WAXS peak	clearly decreases
P1	Position of the 1st WAXS peak	roughly same D ~ 0.74 nm
HW1	Thickness of the 1st WAXS peak	sharpen
H2	Amplitude of the 2nd WAXS peak	roughly same
P2	Position of the 2nd WAXS peak	slightly increases D ~ 0.44-0.48 nm
HW2	Thickness of the 2nd WAXS peak	roughly same
RS	Quality of the WAXS fit	