

Supplementary information

Pervaporation and gas separation properties of high-molecular ladder-like polyphenylsilsesquioxanes

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1. GPC of ladder-like polyphenylsilsesquioxanes (L-PPSQ)

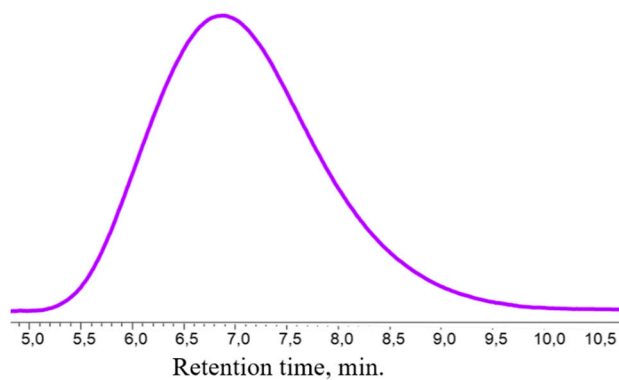


Figure S1. GPC curve of L-PPSQ.

Table S1

Molecular weight characteristics of L-PPSQ

Sample	Monomer concentration, wt%	Temperature, °C	Reaction time, h	Mp, kDa	Mw, kDa	Mn, kDa	PDI
L-PPSQ	20	150	4	577,9	540,4	238,1	2,3

2. TGA analysis of L-PPSQ

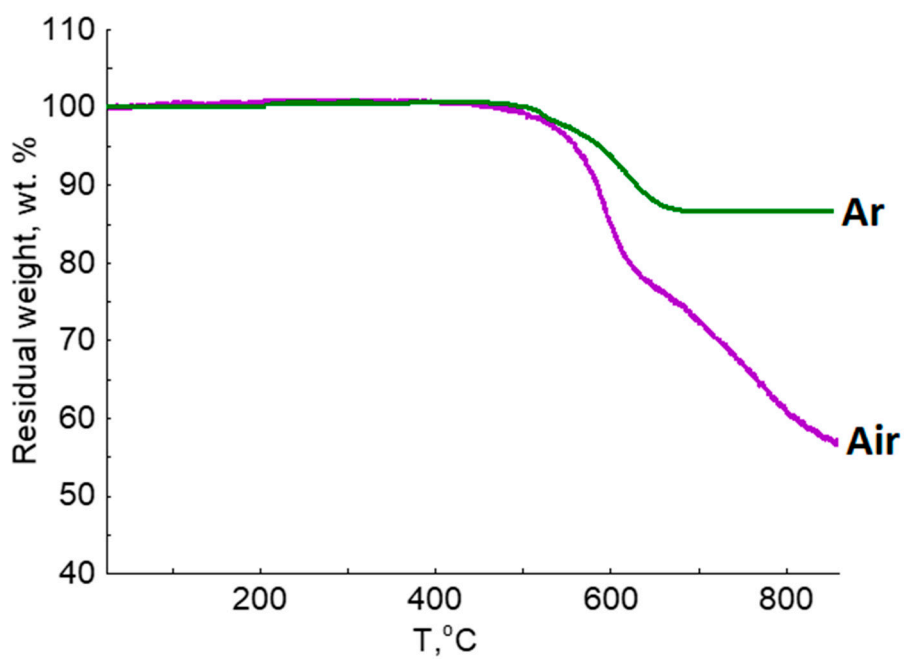


Figure S2. TGA curves of L-PPSQ obtained at a heating rate of 10 degrees/min in air and in argon.

3. Mechanical characteristics of L-PPSQ

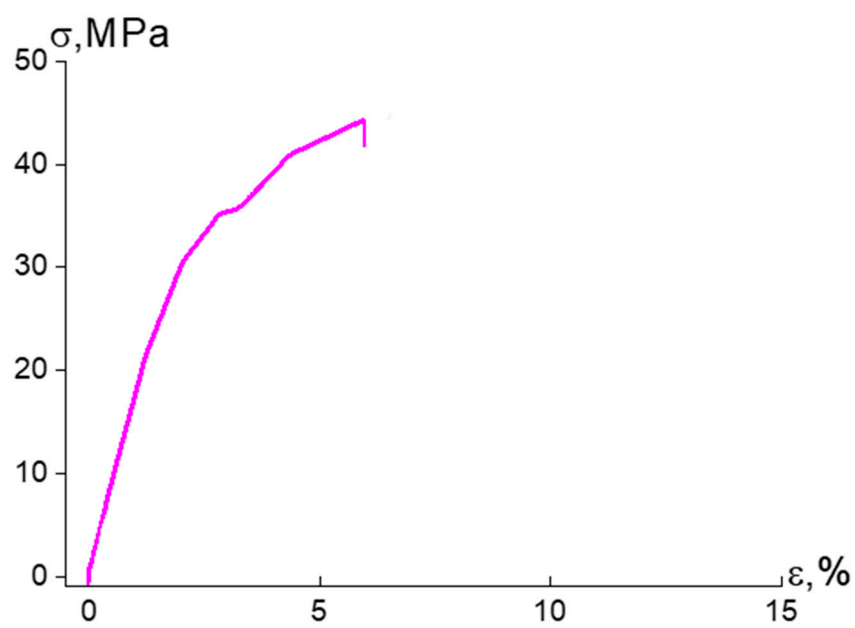


Figure S3. Stretching curve of L-PPSQ