

Electronic Supporting Information (ESI)

**Emulsion-templated porous polymers: Drying condition-
dependent properties**

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1. Experimental

Table S1. Recipes for the PH-X-Ys

	The PH-5-Ys	The PH-10-Ys	The PH-15-Ys
Continuous, aqueous phase, wt.%			
SC-100	5.00	5.00	5.00
F127	1.00	1.00	1.00
H ₂ O	19.00	19.00	19.00
Total	25.00	25.00	25.00
Dispersed, organic phase, wt.%			
Toluene	71.25	67.50	63.75
PFOTS	3.75	7.50	11.25
Total	75.00	75.00	75.00
Dispersed phase fraction, wt.%	75	75	75
PFOTS mass percentage, %	5	10	15
Yield (%)	97.7~97.9	98.7~99.1	99.8~99.9

2. Results and discussion

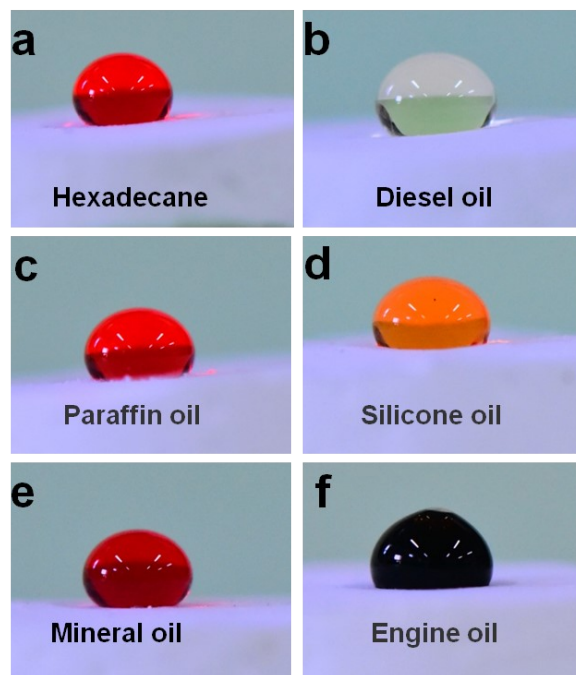


Fig. S1. Various oil droplets on the surface of PH-10-VDs.

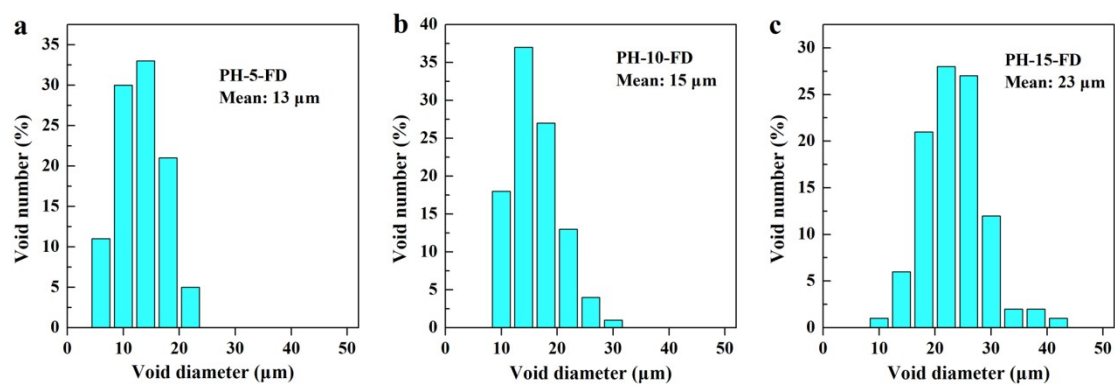


Fig. S2. Emulsion-templated void diameter distributions of the PH-X-FDs.

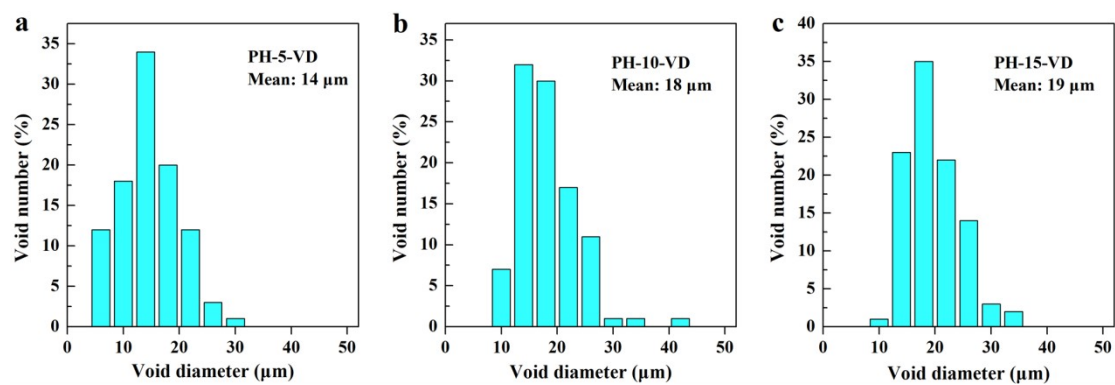


Fig. S3. Emulsion-templated void diameter distributions of the PH-X-VDs.

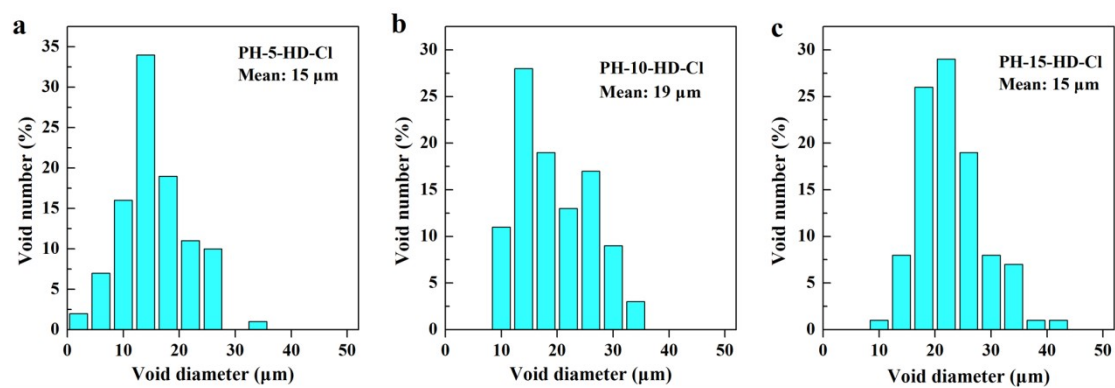


Fig. S4. Emulsion-templated void diameter distributions of the PH-X-HD-Cl.

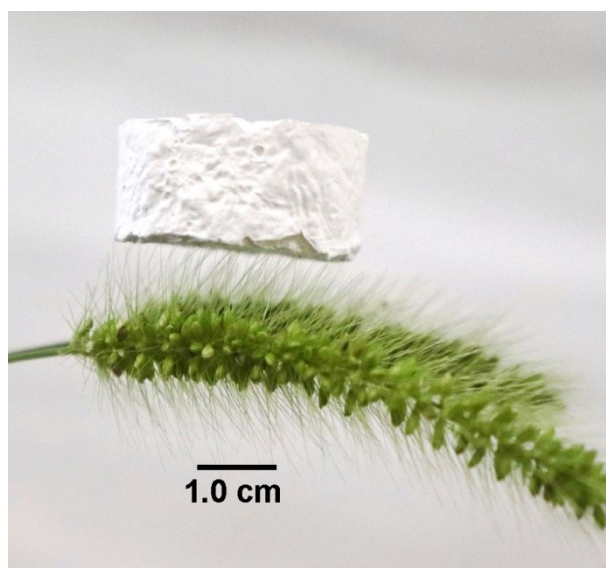


Fig. S5. Low density enabling a piece of PH-5-FD to stand on the top of dog tail grass.

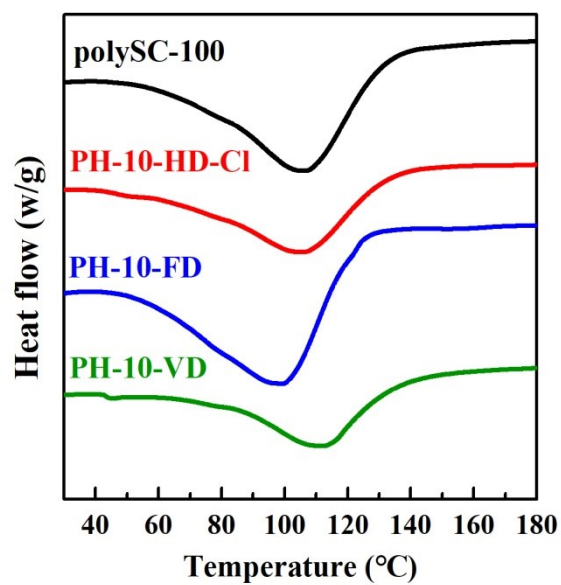


Fig. S6. DSC curves of polySC-100, PH-10-HD-Cl, PH-10-FD and PH-10-VD.

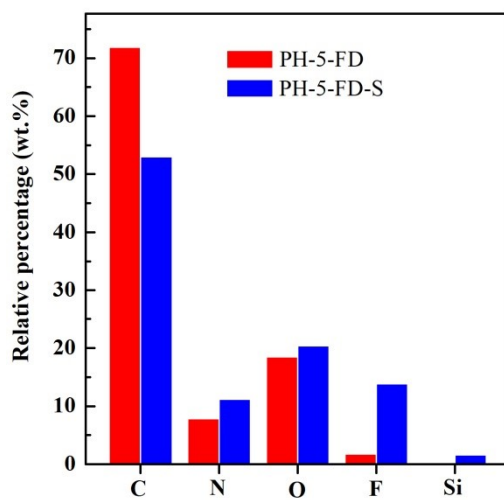


Fig. S7. Elemental (C, N, O, F and Si) contents of PH-5-FD and PH-5-FD-S determined by EDS.

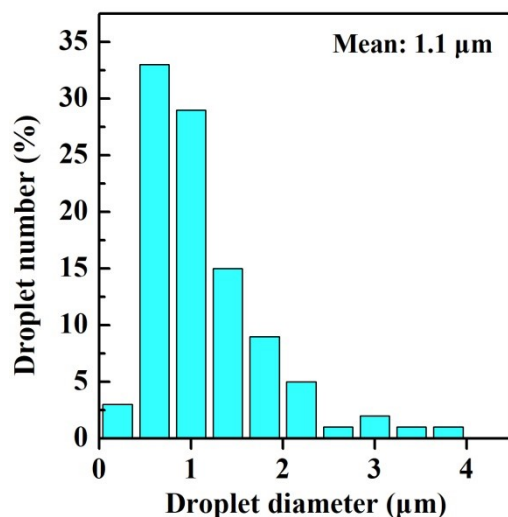


Fig. S8. Diameter distribution of water droplets within the water-in-oil emulsion.

Table S2. Relative content of Cl within HD-X-HD-Cl_s determined using EDS

	PH-5-HD-Cl	PH-10-HD-Cl	PH-15-HD-Cl
Relative content of Cl (%)	0.07	0.29	0.56

3. Videos

Video S1: pH-induced water uptake from a hexadecane-water mixture using PH-10-HD.

Video S2: pH-induced adsorption of fast green from aqueous solution containing hexadecane using PH-10-HD.