

Electronic Supplementary Information

Triphenylamine-Containing Microporous Organic Copolymers for Hydrocarbons Uptake

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Tables

Table S1 Elemental analysis of the polymer.

Sample	Observed Values			Theoretical Values		
	C [%]	H [%]	N [%]	C [%]	H [%]	N [%]
PBP-N-25	77.1	4.9	3.7	92.3	5.9	1.8
PBP-N-50	76.9	4.7	4.8	91.0	5.7	3.3
M-PBP-N-25	88.6	6.2	1.6	92.3	5.9	1.8

It was already observed by Cooper et al. that elemental analysis gives most times wrong results (too low carbon to hydrogen ration and too low carbon content) for microporous polymers.

Table S2 Initial slopes of vapor isotherms at 298 K.

	Initial slopes of isotherms at 298 K			
	H ₂ O	C ₆ H ₆	c-C ₆ H ₁₂	n-C ₆ H ₁₄
PBP-N-25	$y = 11.623x - 0.0529$	$y = 622.41x + 4.4487$	$y = 278.16x + 61.55$	$y = 308.1x + 40.936$
PBP-N-50	$y = 11.84x + 0.2613$	$y = 753.13x - 3.9582$	$y = 346.72x + 42.76$	$y = 241.5x + 65.926$
PP-N-25	$y = 30.579x + 0.1427$	$y = 342.47x + 18.462$	$y = 174.91x + 55.926$	$y = 112.19x + 60.227$
PP-N-50	$y = 21.657x + 0.2112$	$y = 330.85x + 10.33$	$y = 236.49x + 31.562$	$y = 144.19x + 51.02$

Figures

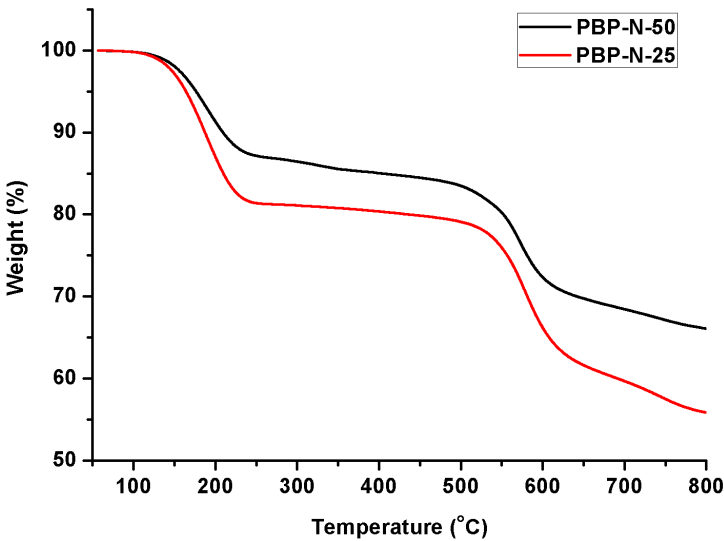
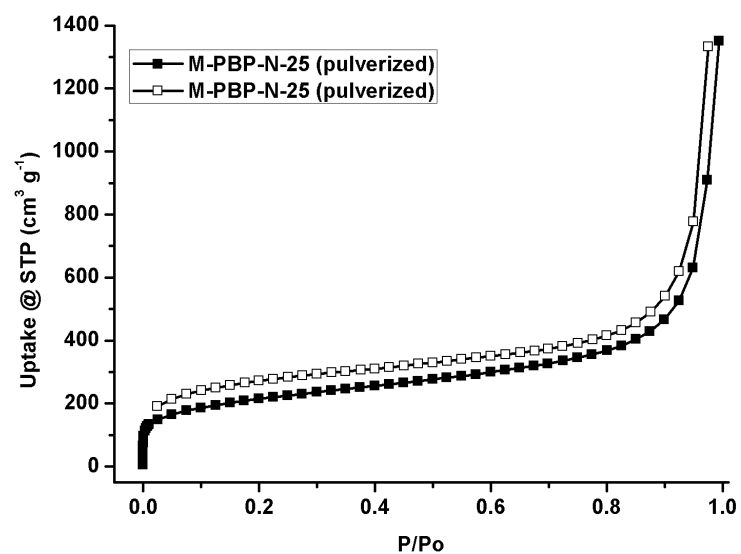
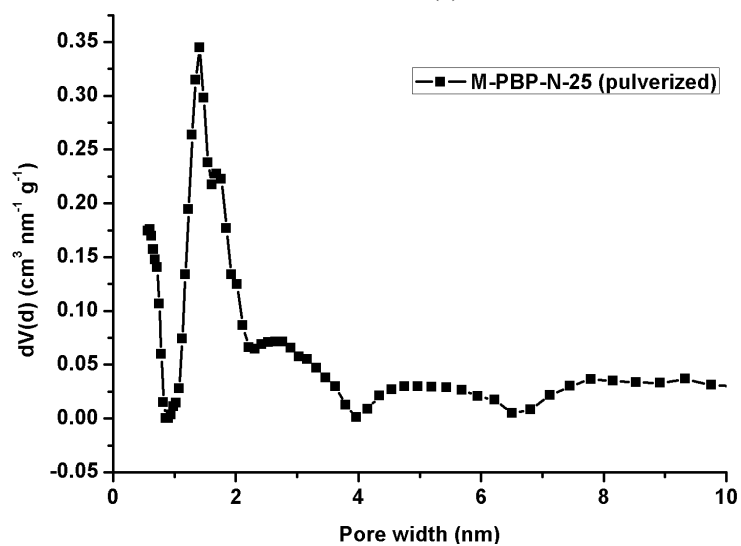


Figure S1 TGA curves of the polymers.



(a)



(b)

Figure S2 a) Nitrogen adsorption-desorption isotherms of pulverized M-PBP-N-25; b) Pore size distribution of porous polymers obtained from nonlinear density functional theory. (The adsorption and desorption branches are labeled with filled and open symbols, respectively.)

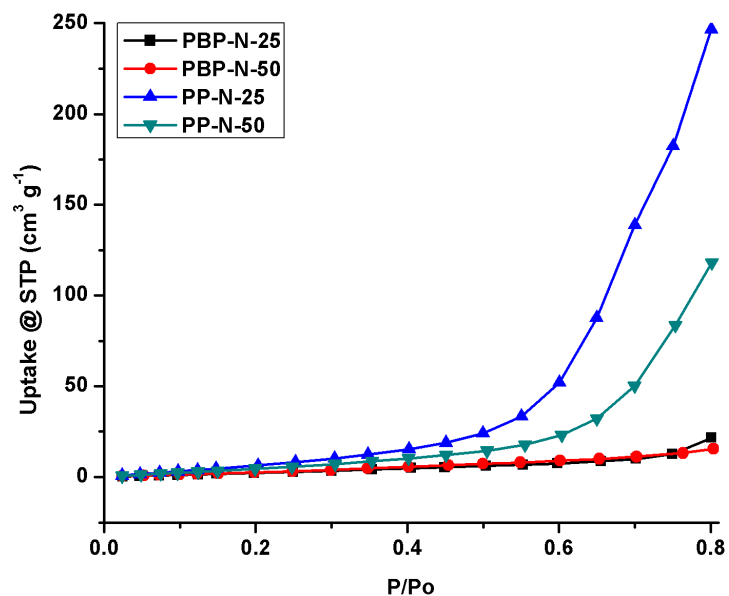


Figure S3 Adsorption isotherms of the polymers for water vapor at 298 K.

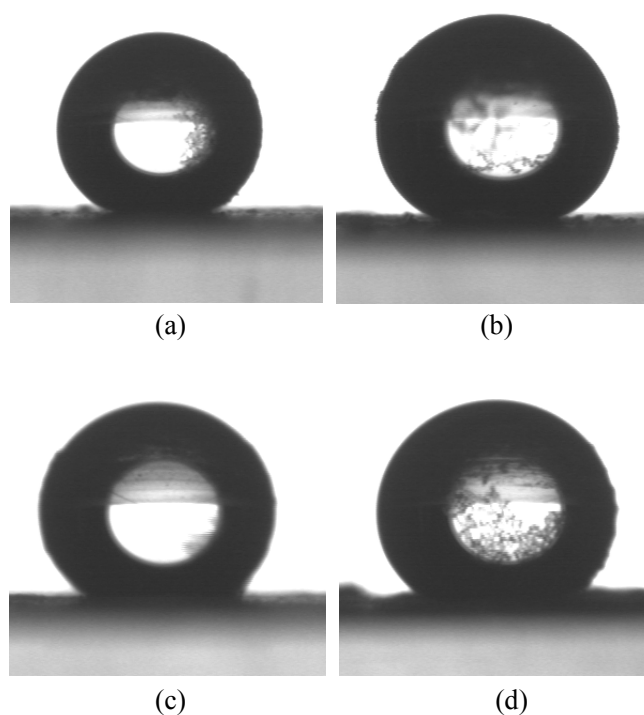


Figure S4 The measurement of contact angle of PBP-N-25 (a), PBP-N-50 (b), PP-N-25 (c) and PP-N-50 (d) with water.