

Supplementary material

Table 1. Chemical structures, pKa values as well as the log values in relation to the sample pH of each compound under study, obtained by dedicated software (Marvin 6.2.2, 2014, ChemAxon, <http://www.chemaxon.com>).

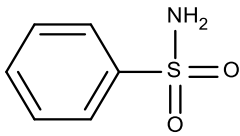
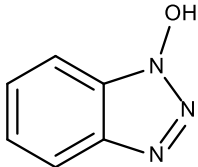
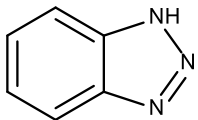
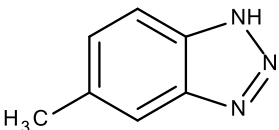
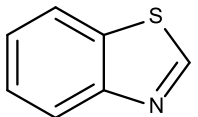
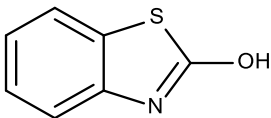
Compound	Chemical structure	pKa value	Sample pH	Log D value
Benzenesulfonamide (BSA)		10.24	2.00	0.58
			5.50	0.58
			8.00	0.58
			11.00	-0.03
1H-1,2,3-benzotriazol-1-ol (OHBT)		6.88	2.00	0.63
			5.50	0.61
			8.00	-0.50
			11.00	-1.74
1H-1,2,3-benzotriazole (BT)		8.63	2.00	1.29
			5.50	1.30
			8.00	1.21
			11.00	-0.24
5-methyl-1H-1,2,3-benzotriazole (MeBT)		8.85	2.00	1.77
			5.50	1.81
			8.00	1.76
			11.00	0.31
1,3-benzothiazole (BTh)		2.25	2.00	1.88
			5.50	2.11
			8.00	2.11
			11.00	2.11
1,3-benzothiazol-2-ol (OHBTh)		11.27	2.00	2.49
			5.50	2.49
			8.00	2.36
			11.00	1.08

Table 2. Retention times (RT), resolution values, LODs, LOQs and r^2 obtained for the target compounds under optimized instrumental conditions.

Compound	RT (min)	Resolution ^a	LODs (mg L ⁻¹)	LOQs (mg L ⁻¹)	r^2 ^b
BSA	4.6	n.a.	0.10	0.330	0.9994
OHBT	5.1	2.0	0.01	0.033	0.9996
BT	10.8	17.0	0.05	0.165	0.9994
MeBT	24.8	20.7	0.05	0.165	0.9992
BTh	28.9	3.7	0.05	0.165	0.9986
OHBTh	31.1	1.8	0.05	0.165	0.9990

^aCalculated in accordance with the RT of the previous peak.

^bLinear range between 0.25 and 5.0 mg L⁻¹ (6 levels).

Table 3. Calibration parameters, including r^2 , slopes and intercept obtained for BSA, OHBT, BT, MeBT, BTh and OHBTh chemicals by BA μ E(R, 12.5 %/CN1, 87.5 %)- μ LD/HPLC-DAD in ultrapure water samples, under optimized experimental conditions.

Compounds	Linear Range ($\mu\text{g L}^{-1}$)	Slope	Intercept	r^2
BSA	5.0 – 120.0	3.1384	0.0906	0.9974
OHBT		9.3813	0.5192	0.9974
BT		7.8438	1.4693	0.9967
MeBT		1.8446	3.3428	0.9971
BTh		1.4750	2.3074	0.9980
OHBTh		11.6360	5.1999	0.9964

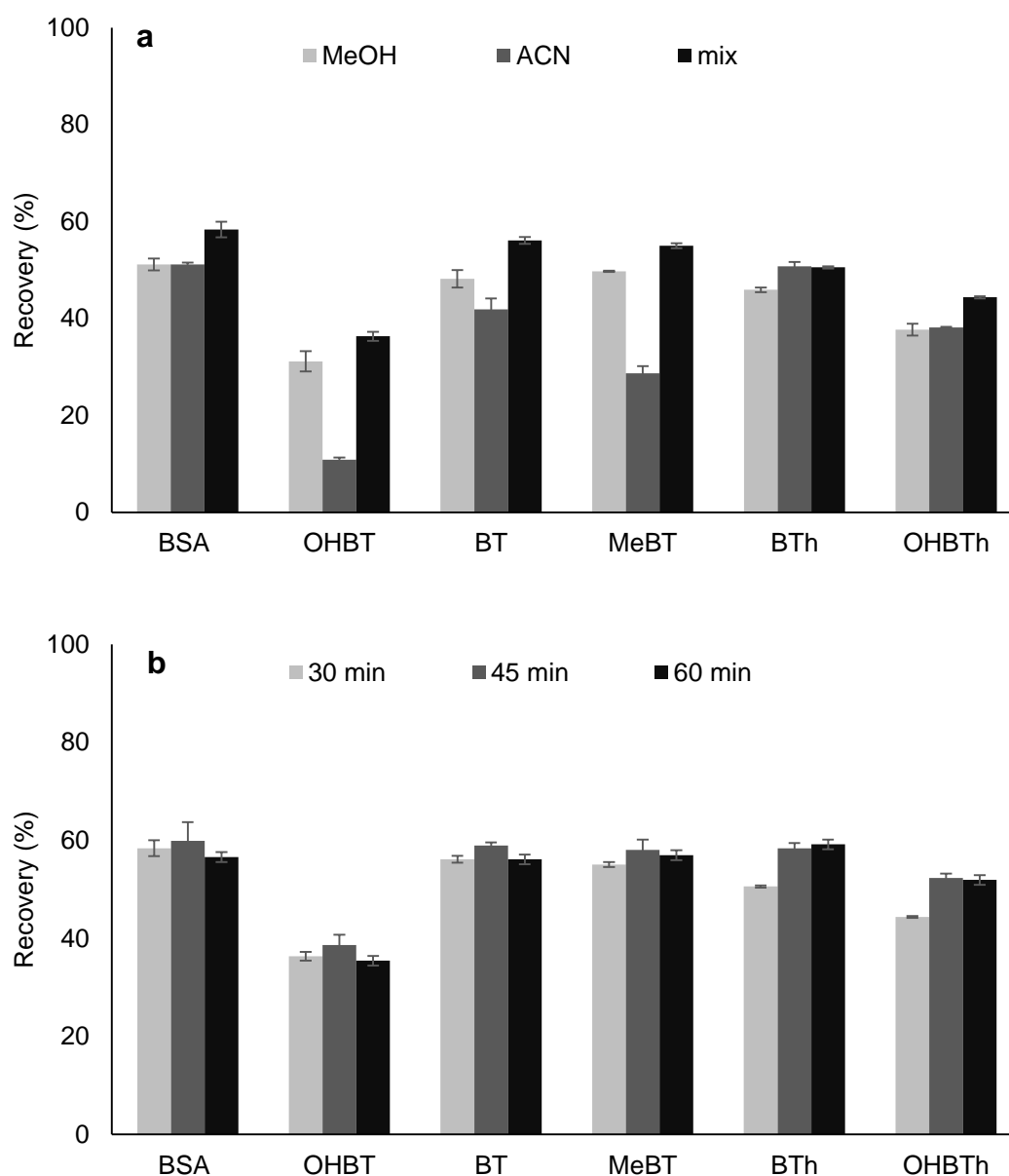


Figure 1. Effect of solvent type (a) and sonication time (b) on the microextraction of the six micropollutants from aqueous media obtained by BA μ E- μ LD/HPLC-DAD. The error bars represent the standard deviation of three replicates.

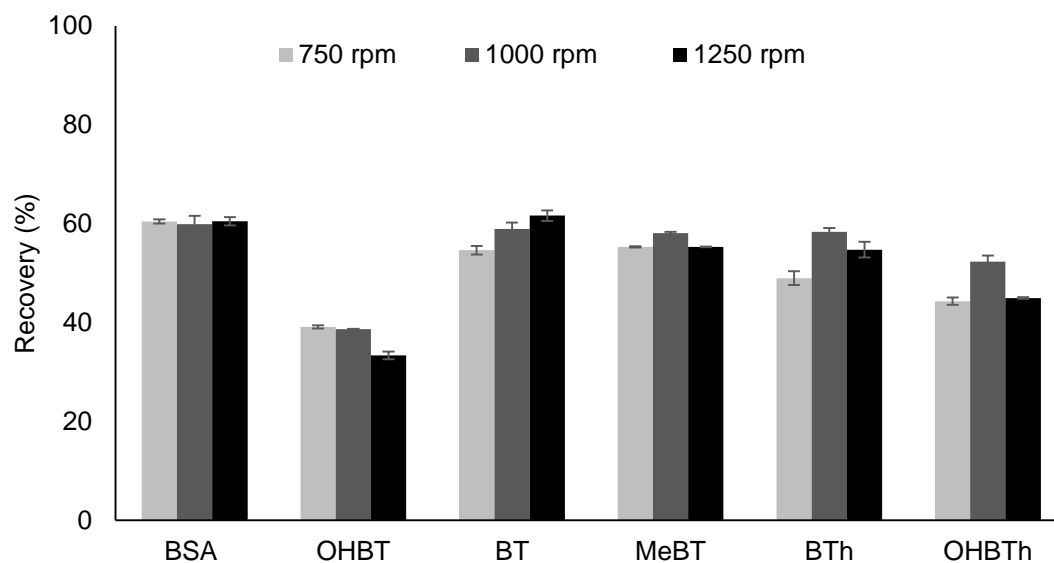


Figure 2. Effect of stirring rate on the microextraction of the six micropollutants from aqueous media obtained by BA μ E- μ LD/HPLC-DAD. The error bars represent the standard deviation of three replicates.

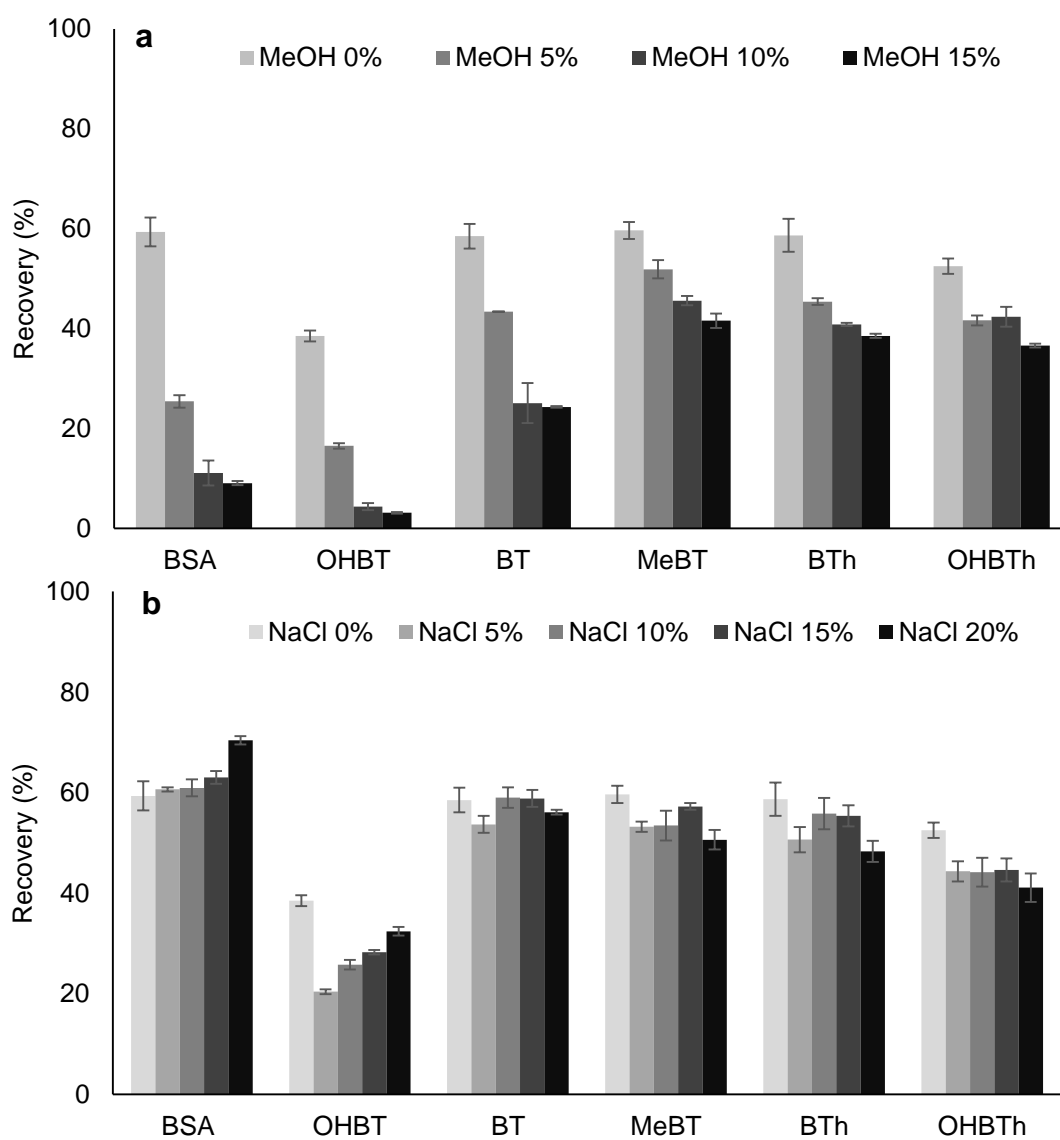


Figure 3. Effect of MeOH (a) and NaCl (b) addition on the microextraction of the six micropollutants from aqueous media obtained by BA μ E- μ LD/HPLC-DAD. The error bars represent the standard deviation of three replicates.