

Electronic Supplementary Information

Liquid phase microextraction based on the solidification of floating ionic liquid combined with high-performance liquid chromatography for the preconcentration of phthalate esters in bottled beverages and environmental waters

Lu Hu, Wanyu Shan, Ying Zhang, Songqing Li, Haixiang Gao, Wenfeng Zhou *

Department of Applied Chemistry, China Agricultural University, Yuanmingyuan West Road 2#,
Haidian District, Beijing 100194, China

* Corresponding author, tel:+86-010-62730244

E-mail addresses: zhouwenfeng@cau.edu.cn (W. Zhou)

Table S1: Spiked recoveries (%) of one juice and two herb tea samples (n=3).

Analytes	Spiked level ($\mu\text{g/L}$)	intra-day						inter-day					
		grape juice		herb tea 1		herb tea 2		grape juice		herb tea 1		herb tea 2	
		RE	RSD	RE	RSD	RE	RSD	RE	RSD	RE	RSD	RE	RSD
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
DEP	50	71.3	2.7	76.4	4.8	78.8	3.4	76.7	5.5	74.2	3.8	76.1	2.7
	100	74.2	5.1	86.6	6.1	74.3	4.0	74.3	2.7	76.0	2.5	74.5	6.5
DAP	50	84.0	7.0	89.4	5.6	87.4	5.5	82.7	2.9	83.9	7.1	86.7	4.8
	100	87.4	3.8	94.5	4.1	89.5	4.0	88.3	1.6	90.2	1.6	85.6	7.5
BBP	50	77.7	4.6	83.1	5.7	88.1	2.9	80.5	5.7	76.1	7.2	85.7	5.0
	100	78.4	5.5	82.1	6.6	78.6	3.1	86.0	2.1	83.6	5.8	77.7	3.7
DCHP	50	79.4	3.8	86.8	3.5	83.7	6.4	78.5	6.5	79	5.2	78.8	5.7
	100	79.2	3.0	76.5	5.7	70.2	1.3	76.3	1.9	80	3.3	71.2	3.1

$[C_{24}H_{52}P]^+BF_4$ m/z: 371.38011

meas. m/z: 371.38037

Hulu #5 RT: 0.02 AV: 1 NL: 5.38E8
T: FTMS + p ESI Full ms [250.00-450.00]

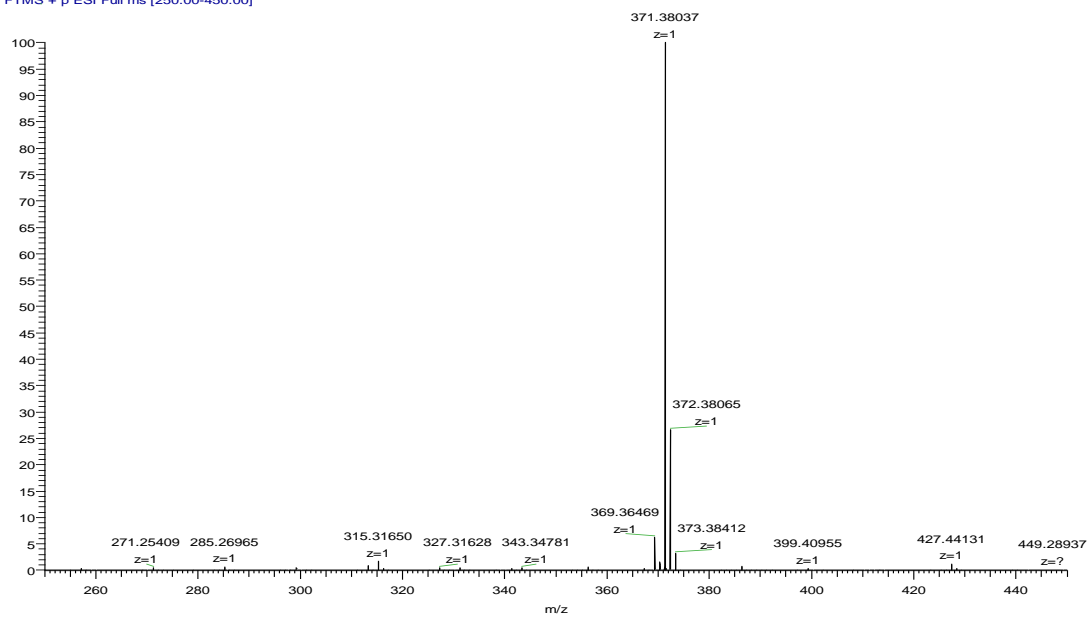


Fig. S1 The mass spectrum of $[P_{44412}][BF_4]$

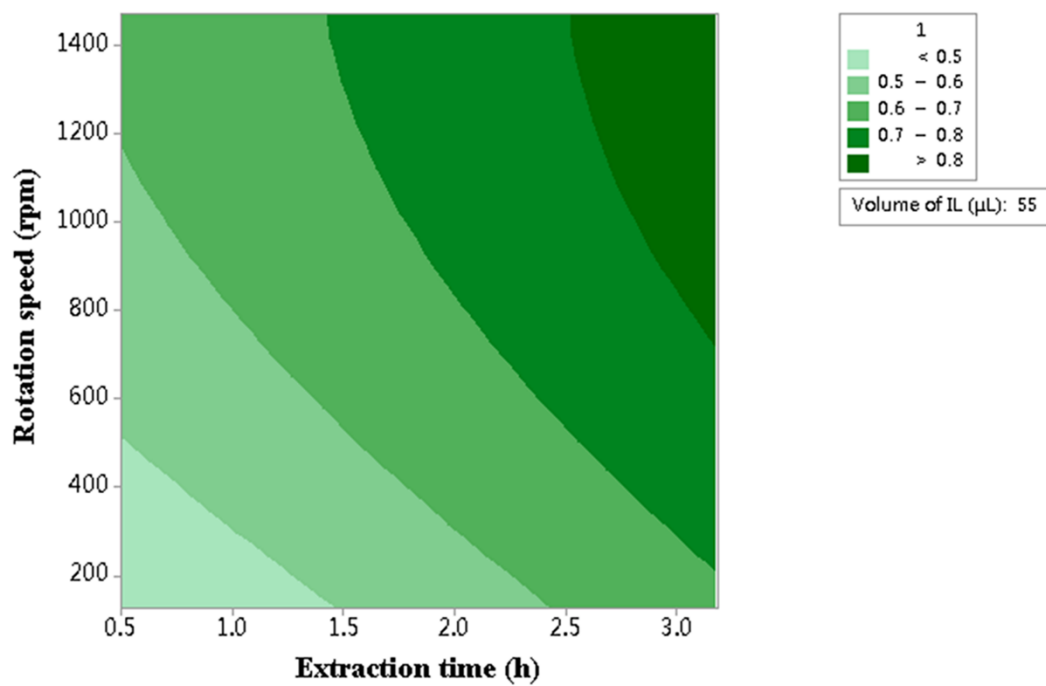


Fig. S2 Contour Plot of Extraction time (h) vs Rotation speed (rpm)