

Organophosphorus Flame Retardants in Water by LC-MS/MS

ACE[®]
Ultra-inert
UHPLC & HPLC Columns

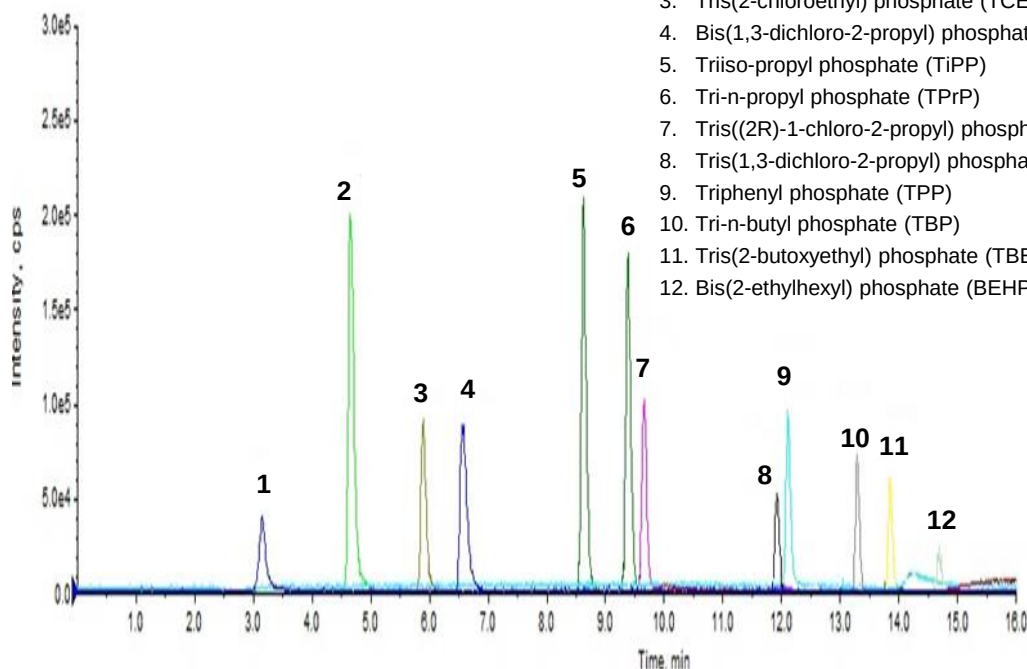
Application #AN1240

Conditions

Column: ACE 3 C18
Dimensions: 100 x 2.1 mm
Part Number: ACE-111-1002
Mobile Phase: A: 0.05 mM ammonium formate + 0.005% formic acid in H₂O
B: MeOH/MeCN (95:5 v/v)

Time (mins)	%B
0.1	50
12.0	90
13.0	100
15.0	100
15.1	50
20.0	50

Flow Rate: 0.25 mL/min
Injection: 80 µL
Temperature: 25 °C
Detection: MS/MS



	Q1 Mass	Q3 Mass
1. Trimethyl phosphate (TMP)	141	109
2. Triethyl phosphate (TEP)	183	127
3. Tris(2-chloroethyl) phosphate (TCEP)	285	223
4. Bis(1,3-dichloro-2-propyl) phosphate (BDCP)	321	99
5. Triisopropyl phosphate (TiPP)	225	99
6. Tri-n-propyl phosphate (TPnP)	225	99
7. Tris((2R)-1-chloro-2-propyl) phosphate (TCPP)	327	99
8. Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	431	99
9. Triphenyl phosphate (TPP)	327	215
10. Tri-n-butyl phosphate (TBP)	267	211
11. Tris(2-butoxyethyl) phosphate (TBEP)	399	299
12. Bis(2-ethylhexyl) phosphate (BEHP)	323	99