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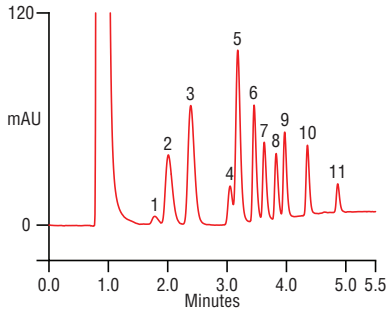
Fast Phenols on a Thermo Scientific™ Acclaim™ 120 C18 Column



Column:	Thermo Scientific™ Acclaim™ 120 C18, 3 µm, 3.0 × 75 mm					
Pump:	Thermo Scientific™ Dionex™ Summit P680A DGP					
Mobile Phases:	(A) 1% Acetic acid v/v (B) 160 mM Ammonium acetate (C) Methanol					
Flow:	0.638 mL/min					
Gradient Time:	–4.00	0.00	0.25	2.00	5.50	
%A	52.00	52.00	52.00	4.55	4.55	
%B	5.00	5.00	5.00	0.45	0.45	
%C	43.00	43.00	43.00	95.00	95.00	
Temperature:	TCC-100 thermostat at 30 °C					
Injection:	ASI-100 sampler at 4 µL					
Detector:	UVD-340U, UV 285 nm and spectra 200–500 nm					

Peaks: (EPA 604 phenols mix diluted to 50 µg/mL in acetone)

1. Phenol
2. 2,4- Di-NO_2-phenol
3. 4- NO_2-phenol
4. 2-Cl-phenol
5. 2-NO_2-phenol
6. 2-Me-4,6-diNO_2-phenol
7. 2,4- di-Me-phenol
8. 4-Cl-3-Me-phenol
9. 2,4- di-Cl-phenol
10. 2,4,6- tri-Cl-phenol
11. Penta-Cl-phenol

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Phenols are traditionally analyzed by GC, but HPLC can be used to separate and detect a variety of these important compounds. With fast, high-resolution columns such as the Acclaim 120 C18 3 µm 3.0 × 75 mm, the analysis cycle is complete in under 10 minutes.