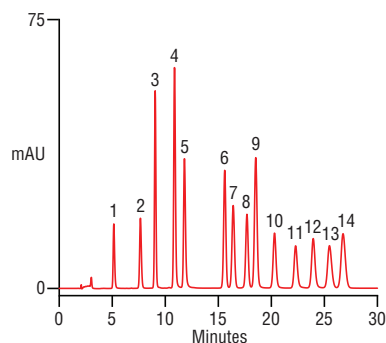


High-Resolution for EPA Method 8330 with a Thermo Scientific™ Acclaim™ Explosives E2 Column



Column: Thermo Scientific™ Acclaim™ Explosives E2,
3 μ m, 3 $\times$ 250 mm
Mobile Phase: MeOH:H₂O 49:51 (v/v)
Flow: 0.54 mL/min (470 bar)
Temperature: 27 °C
Injection: 2.6 μ L
Detector: UV at 254 nm
Sample: 50 μ g/mL in 50% (v/v) CH₃CN

Peak	Compound	Resol.	Plates
1.	HMX	9.10	6784
2.	RDX	5.16	10368
3.	1,3,5-TNB	6.77	22034
4.	1,3-DNB	3.02	21816
5.	NB	10.72	21071
6.	2,4,6-TNT	1.94	26203
7.	Tetryl	2.97	21901
8.	2,6-DNT	11.87	26587
9.	2,4-DNT	3.69	26039
10.	2-NT	3.77	26204
11.	4-NT	2.92	25990
12.	3-NT	2.36	26290
13.	4-Am-2,6-DNT	1.76	20427
14.	2-Am-4,6-DNT	n.a.	20455

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The new 3 μ m 3 $\times$ 250 mm format allows a significant increase in resolution for EPA Method 8330A. The smaller 3 μ m particle size gives higher resolution, and the new format is rated to 800 bar. There is enough extra resolution that a small increase in speed may also be achieved.