

APPLICATIONS

Analysis of Explosives Found in EPA 8330A and 8330B Using a Kinetex[®] 2.6 μm Polar C18 Column



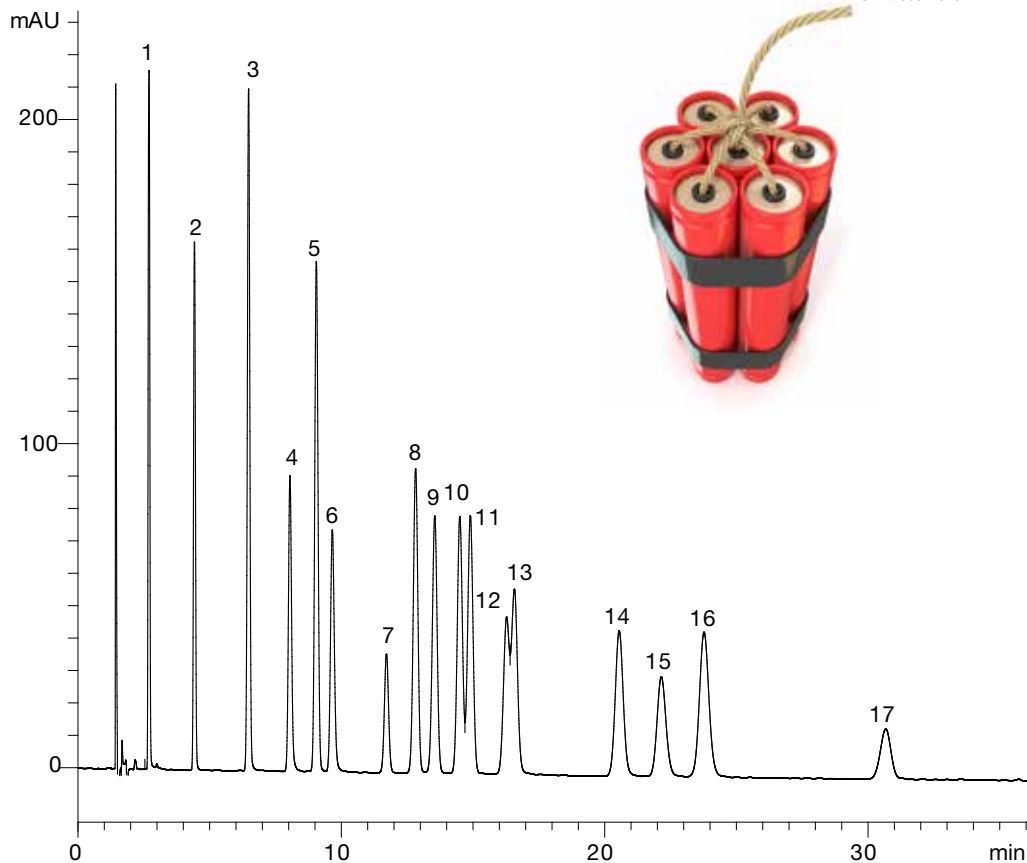
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Overview

Here we present a single high efficiency separation and analysis of common explosives, typically analyzed by EPA 8330A and 8330B. For such a mixture of related compounds, the Polar C18 stationary phase bonded to a Kinetex core-shell particle was chosen because of its high efficiency separation power alongside dual polar/non-polar selectivity that can greatly help to magnify small differences between similar compounds of interest.

LC Conditions

Column:	Kinetex 2.6 μm Polar C18	
Dimension:	150 x 4.6 mm	
Part No.:	00F-4759-E0	
Mobile Phase:	A: 0.1 % Formic Acid in Water B: 0.1 % Formic Acid in Methanol (A/B, 70:30)	
Flow Rate:	1 mL/min	
Temperature:	Ambient	
Detection:	UV @ 210 nm	
Injection Volume:	5 μL	
Analytes:	1. HMX	10. 2-Amino-4-6-dinitrotoluene
	2. RDX	11. 4-Amino-2,6-dinitrotoluene
	3. 1,3,5-Trinitrobenzene	12. 2,4-Dinitrotoluene
	4. 1,3-Dinitrobenzene	13. 2,6-Dinitrotoluene
	5. 3,5-Dinitroaniline	14. 2-Nitrotoluene
	6. Tetryl	15. 4-Nitrotoluene
	7. Nitroglycerin	16. 3-Nitrotoluene
	8. 2,4,6-Trinitrotoluene	17. PETN
	9. Nitrobenzene	



App ID 24366



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Kinetex Ordering Information

2.6 µm Minibore Columns (mm)					SecurityGuard™ ULTRA Cartridges [†]
Phases	30 x 2.1	50 x 2.1	100 x 2.1	150 x 2.1	3/pk
Polar C18	00A-4759-AN	00B-4759-AN	00D-4759-AN	00F-4759-AN	AJ0-9532 for 2.1 mm ID

2.6 µm MidBore™ Columns (mm)				SecurityGuard ULTRA Cartridges [†]
Phases	50 x 3.0	100 x 3.0	150 x 3.0	3/pk
Polar C18	00B-4759-Y0	00D-4759-Y0	00F-4759-Y0	AJ0-9531 for 3.0 mm ID

2.6 µm Analytical Columns (mm)				SecurityGuard ULTRA Cartridges [†]
Phases	50 x 4.6	100 x 4.6	150 x 4.6	3/pk
Polar C18	00B-4759-E0	00D-4759-E0	00F-4759-E0	AJ0-9530 for 4.6 mm ID

[†] SecurityGuard ULTRA Cartridges require holder, Part No.: AJ0-9000.

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