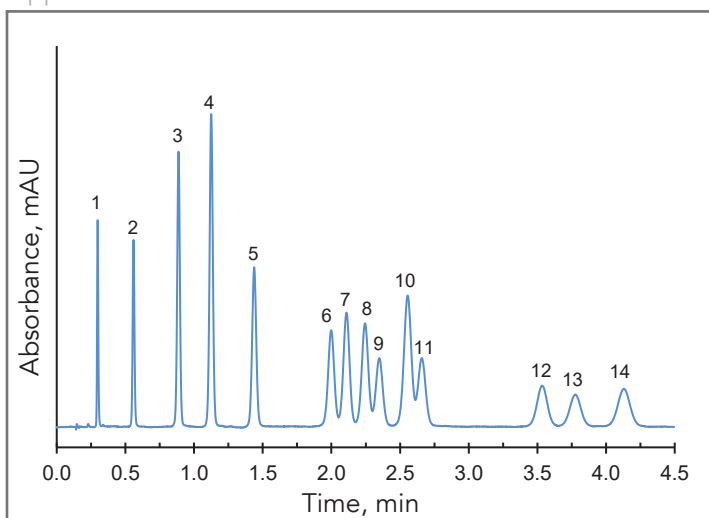




Separation of Explosives on HALO[®] C18

Application Note 50-EX



PEAK IDENTITIES:

1. HMX
2. RDX
3. 1,3,5-Trinitrobenzene
4. 1,3-Dinitrobenzene
5. Nitrobenzene
6. Tetryl
7. 2, 4, 6-Trinitrotoluene
8. 2-Amino-4,6-dinitrotoluene
9. 4-Amino-2,6-dinitrotoluene
10. 2,6-Dinitrotoluene
11. 2,4-Dinitrotoluene
12. 2-Nitrotoluene
13. 4-Nitrotoluene
14. 3-Nitrotoluene

Fourteen explosive materials can be rapidly separated on the highly efficient HALO[®] C18 phase in under 5 minutes at a relatively high flow rate and moderate pressure.

TEST CONDITIONS:

Column: HALO 90 Å C18, 2.7 μm,
4.6 x 50 mm

Part Number: 92814-402

Mobile Phase: 73/27 - A/B

A: Water

B: Methanol

Flow Rate: 3.3 mL/min

Pressure: 343 bar

Temperature: 40 °C

Detection: UV 254 nm, VWD

Injection Volume: 1.0 μL

Sample: Standards diluted with methanol/
water

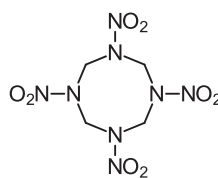
Response Time: 0.02 sec

Flow Cell: 2.5 μL semi-micro

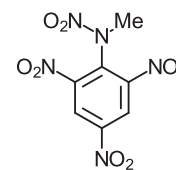
LC System: Shimadzu Prominence UFLC XR

Extra Column Volume: ~14 μL

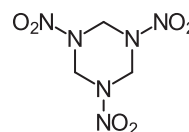
STRUCTURES:



HMX



Tetryl



RDX

