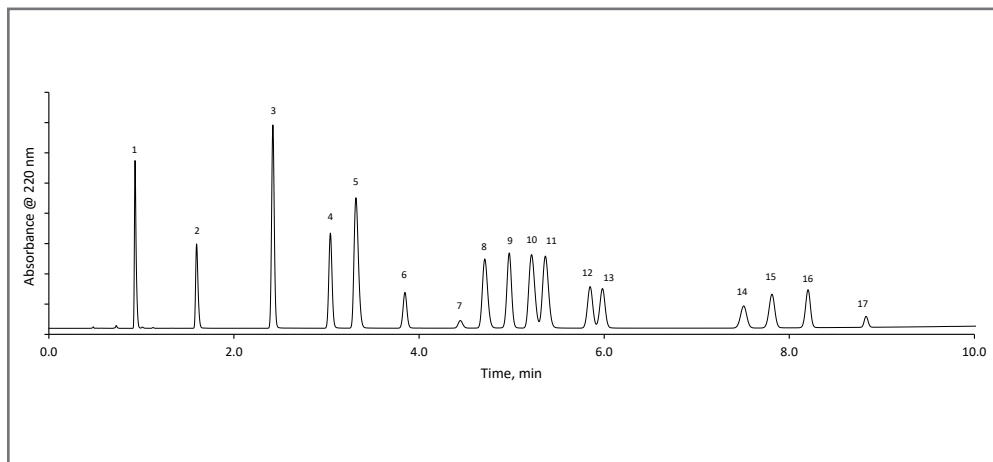




## UHPLC Separation of Explosives on 2 µm HALO® C18

239-EX



### PEAK IDENTITIES

1. HMX
2. RDX
3. 1,3,5-Trinitrobenzene
4. 1,3-Dinitrobenzene
5. 3,5-Dinitroaniline
6. Nitrobenzene
7. Nitroglycerin
8. Tetryl
9. 2,4,6-Trinitrotoluene
10. 2-Amino-4,6-dinitrotoluene
11. 4-Amino-2,6-dinitrotoluene
12. 2,4-Dinitrotoluene
13. 2,6-Dinitrotoluene
14. 2-Nitrotoluene
15. 4-Nitrotoluene
16. 3-Nitrotoluene
17. PETN (pentaerythritol tetranitrate)

### TEST CONDITIONS:

**Column:** HALO 90 Å C18, 2 µm, 3.0 x 100 mm

**Part Number:** 91813-602

**Mobile Phase A:** Water

**Mobile Phase B:** Methanol

Gradient:	Time	%B
	0.0	25
	6.9	35
	9.9	62

**Flow Rate:** 0.85 mL/min

**Initial Back Pressure:** 571 bar

**Temperature:** 43°C

**Detection:** 220 nm

**Injection Volume:** 0.2 µL

**Sample Solvent:** Methanol

**Data Rate:** 100 Hz

**LC System:** Shimadzu Nexera X2

The determination of explosives in the environment is outlined in EPA method 8330B. 17 explosive compounds are separated on a HALO 90 Å 2 µm C18 column in less than 10 minutes using a water/methanol gradient. These compounds are either used in the manufacture of explosives or propellants. The impurities or degradation of these compounds could be found in water, soil, or sediment samples.

