Gases

Analysis of decomposition gases from explosives (1,3,3-trinitroazetidine, TNAZ)

Application Note

Homeland Security

Authors

Agilent Technologies, Inc.

Introduction

A single PLOT column separates a large number of gases which are formed during the decomposition of explosives. The narrow-bore Agilent PoraPLOT Q column allows direct coupling to a mass spectrometer and dramatically improves the analytical capabilities for compositional analyses of decomposition gases. This single column system is able to simultaneously separate and detect N_2, CO, CO_2, NO, N_2O, H_2O, HCN and cyanogen.

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Conditions
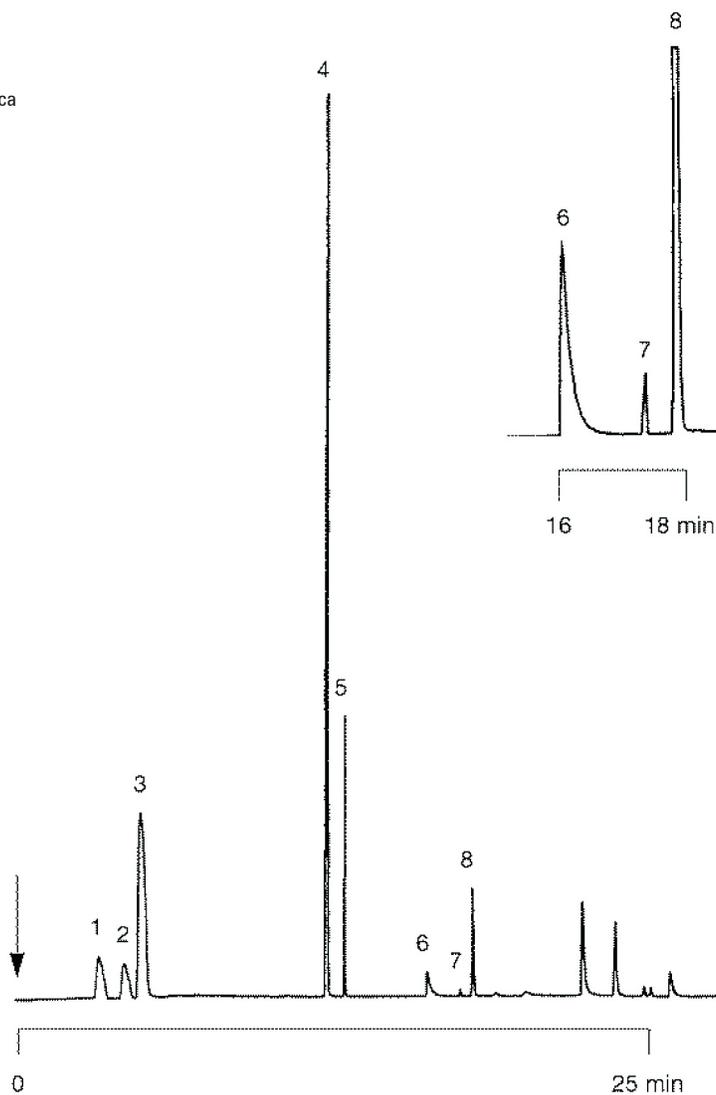
Peak identification

1. nitrogen
2. carbon monoxide
3. nitric oxide (NO)
4. carbon dioxide
5. nitrous oxide (N_2O)
6. water
7. cyanogen (C_2N_2)
8. hydrocyanic acid (HCN)

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