

Application Report 216

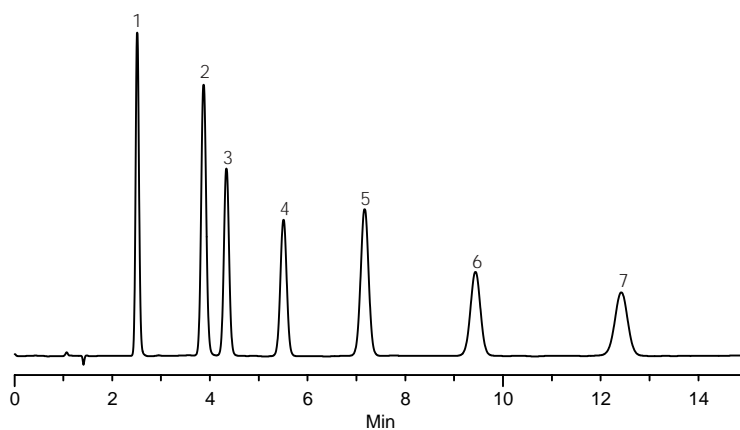
Analysis of Barbitals Using Ascentis™ C18

This application demonstrates the suitability of the Ascentis C18 for the analysis of seven Barbitals. Structures along with the optimized chromatogram obtained on the Ascentis C18 are presented.

Key Words

Barbital, B0375, 57-44-3, Aprobarbital, 77-02-1, Phenobarbital, P1636, 50-06-6, Butabarbital, 125-40-6, Mephobarbital, 115-38-8, Pentobarbital, 76-74-4, Secobarbital, S1503, 76-73-3, Ascentis C18, 581324-U

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Acquisition System: Thermo
Notebook Reference: 1551



G002877

Conditions

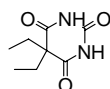
column: Ascentis C18, 15 cm x 4.6 mm I.D., 5 µm particles (581324-U)
mobile phase: 50:50, water: methanol
flow rate: 1.0 mL/min.
temp.: 35 °C
det.: UV at 214 nm
injection: 10 µL
sample: as indicated in 65:35 water:methanol

Peak IDs

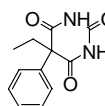
1. Barbital (50 µg/mL)
2. Phenobarbital (50 µg/mL)
3. Aprobarbital (50 µg/mL)
4. Butabarbital (50 µg/mL)
5. Mephobarbital (50 µg/mL)
6. Pentobarbital (50 µg/mL)
7. Secobarbital (50 µg/mL)

Structures

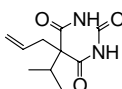
Barbital - G002870



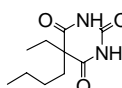
Phenobarbital - G002872



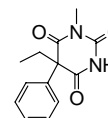
Aprobarbital - G002871



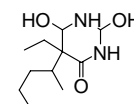
Butabarbital - G002873



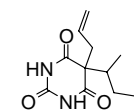
Mephobarbital - G002874



Pentobarbital - G002875



Secobarbital - G002876



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