Application Report 342

Analysis of Barbituates LC-UV Using Ascentis™ C8

Seven barbituates are separated on Ascentis C8 and detected by UV at 214 nm.

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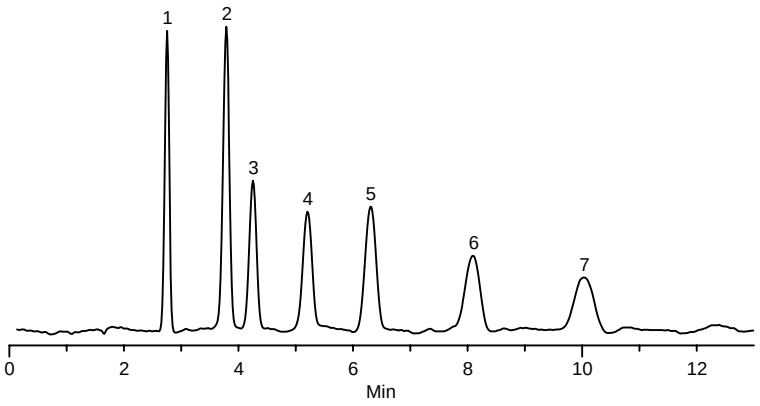
Acquisition System: W2795

Notebook Reference: 1549-90

Key Words

LC-UV, Ascentis C8, drugs of abuse, 34966, 39253, 57-44-3, B-0375, 50-06-6, P-1636, 76-73-3, S-1503, 57-33-0, P-3761, 77-02-1, 125-40-6, 115-38-8, 76-74-4, barbital, phenobarbital, aprobarbital, butabarbital, mephobarbital, pentobarbital, secobarbital, sedatives, 581424-U



G003307

Conditions

column: Ascentis C8, 15 cm x 4.6 mm I.D., 5 µm particles (581424-U)
mobile phase: 55:45, water:methanol
flow rate: 1.0 mL/min.
temp.: 35 °C
det.: UV at 214 nm
injection: 5 µL
sample: 10 µg/mL each in 50:50 water:methanol

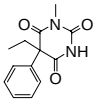
Peak IDs

1. Barbital $(M-H)^-$ = 183.08
2. Phenobarbital $(M-H)^-$ = 231.08
3. Aprobarbital $(M-H)^-$ = 209.10
4. Butabarbital $(M-H)^-$ = 211.11
5. Mephobarbital $(M-H)^-$ = 245.10
6. Pentobarbital $(M-H)^-$ = 225.13
7. Secobarbital $(M-H)^-$ = 237.13

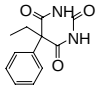
Structures

Barbital - G002870

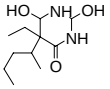
Mephobarbital - G002874



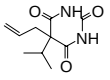
Phenobarbital - G002872



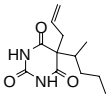
Pentobarbital - G002875



Aprobarbital - G002871



Secobarbital - G002876



Butabarbital - G002873