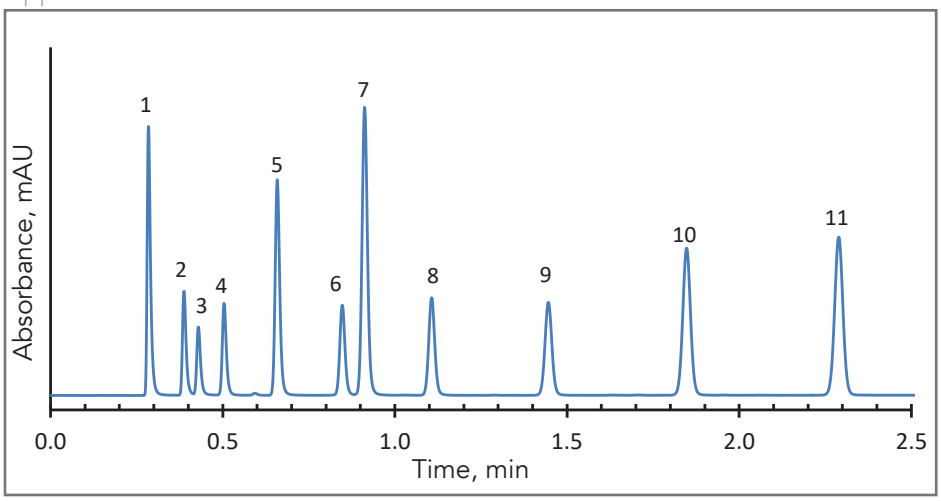
HALO®

INDUSTRIAL

Rapid HPLC Separation of Phenones on HALO® C18 Phase

Application Note 27-P



PEAK IDENTITIES:

1. Uracil
2. 2',4'-Dihydroxyacetophenone
3. 2',6'-Dihydroxyacetophenone
4. Acetophenone
5. Propiophenone
6. Butyrophenone
7. Benzophenone
8. Valerophenone
9. Hexanophenone
10. Heptanophenone
11. Octanophenone

Phenones are often used in synthetic organic chemistry as starting materials. The purity or concentration or purity of these materials can be determined as shown in this short separation on a HALO® C18 column.

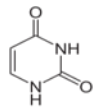
TEST CONDITIONS:

Column: HALO 90 Å C18, 2.7 µm, 4.6 x 50 mm
Part Number: 92814-402
Mobile Phase: 40/60 - A/B
A: Water
B: Acetonitrile
Gradient:

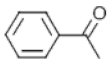
Time (min)	% B
0.0	60
2.0	80
2.5	80

Flow Rate: 1.5 mL/min
Pressure: 126 bar
Temperature: 30 °C
Detection: UV 254 nm, VWD
Injection Volume: 1.0 µL
Sample Solvent: 50/50 methanol/acetonitrile
Response Time: 0.02 sec
Flow Cell: 2.5 µL semi-micro
LC System: Shimadzu Prominence UFLC XR
Extra Column Volume: ~14 µL

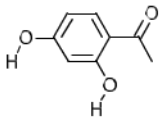
STRUCTURES:



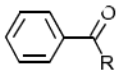
Uracil



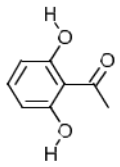
Acetophenone



2',4'-Dihydroxyacetophenone



Substituted Phenones



2',6'-Dihydroxyacetophenone