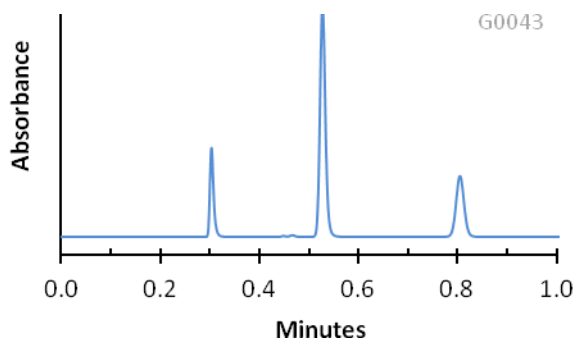


Application Note: 61-CB

Separation of Carbamate Pesticides on HALO C18 Phase



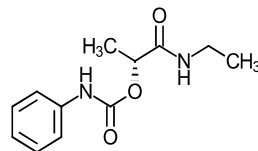
PEAK IDENTITIES:

1. Carbetamide
2. Propham
3. Chlorpropham

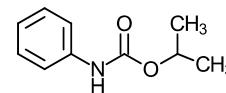
TEST CONDITIONS:

Column: 4.6 x 50 mm, HALO C18
Part Number: 92814-402
Mobile Phase: 40/60-A/B
A= Water
B=Acetonitrile
Flow Rate: 2.0 mL/min.
Pressure: 130 Bar
Temperature: 30 °C
Detection: UV 240 nm, VWD
Injection Volume: 0.2 µL
Sample Solvent: Acetonitrile
Response Time: 0.02 sec.
Flow Cell: 2.5 µL semi-micro
LC System: Shimadzu Prominence UFLC XR
Extra column volume: ~14 µL

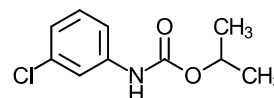
STRUCTURES:



Carbetamide



Propham

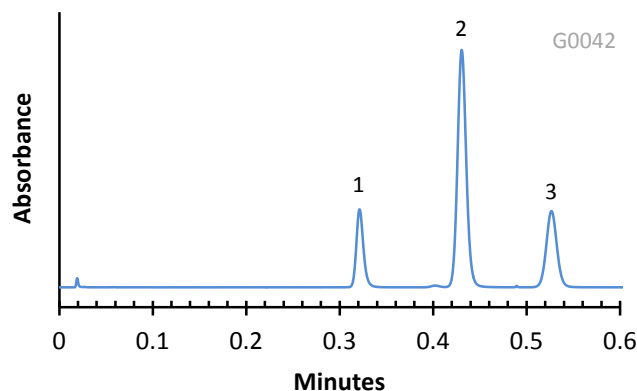


Chlorpropham

This separation illustrates a rapid HPLC determination of three carbamate pesticides on HALO C18 phase in just under a minute. The unique Fused-Core technology allows the use of high flow rates at moderate pressures while retaining high efficiency.

Application Note: 60-CB

Separation of Carbamate Pesticides on HALO ES-CN Phase



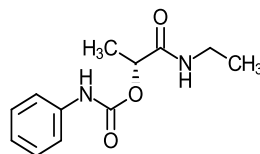
PEAK IDENTITIES:

1. Carbetamide
2. Propham
3. Chlorpropham

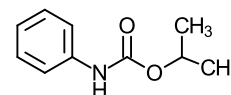
TEST CONDITIONS:

Column: 4.6 x 50 mm, HALO ES-CN
Part Number: 92814-404
Mobile Phase: 40/60-A/B
A= Water
B=Acetonitrile
Flow Rate: 2.0 mL/min.
Pressure: 165 Bar
Temperature: 30 °C
Detection: UV240 nm, VWD
Injection Volume: 0.2 µL
Sample Solvent: Acetonitrile
Response Time: 0.02 sec.
Flow Cell: 2.5 µL semi-micro
LC System: Shimadzu Prominence UFLC XR
Extra column volume: ~14 µL

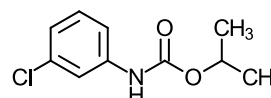
STRUCTURES:



Carbetamide



Propham

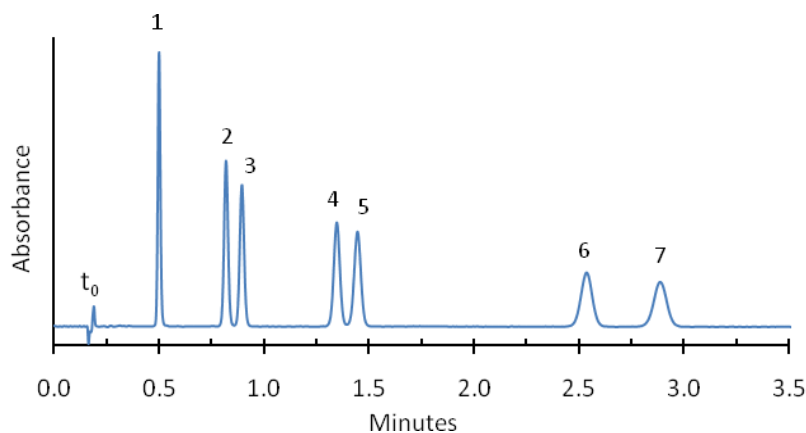


Chlorpropham

This separation illustrates a rapid HPLC determination of three carbamate pesticides on HALO ES-CN phase in just over half a minute. The unique Fused-Core technology allows the use of high flow rates at moderate pressures while retaining high efficiency.

Application Note: 41-TR

Rapid Separation of Triazine Pesticides on HALO C18 Phase



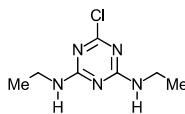
PEAK IDENTITIES:

1. Simazine
2. Atrazine
3. Prometon
4. Ametryn
5. Propazine
6. Prometryn
7. Terbutryn

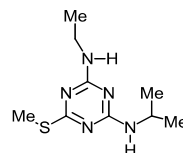
TEST CONDITIONS:

Column: 4.6 x 50 mm, HALO C18
 Part Number: 92814-402
 Mobile Phase: 50/50-A/B
 A= 0.02 M Ammonium formate, adj. to pH=6.0
 B=Acetonitrile
 Flow Rate: 2.5 mL/min.
 Pressure: 270 Bar
 Temperature: 30 °C
 Detection: UV 220 nm, VWD
 Injection Volume: 0.3 µL
 Sample: Supelco Triazine Pesticides Mix-48392
 Sample Solvent: Methanol
 Response Time: 0.02 sec.
 Flow Cell: 2.5 µL semi-micro
 LC System: Shimadzu Prominence UFLC XR
 Extra column volume: ~14 µL

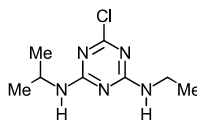
STRUCTURES:



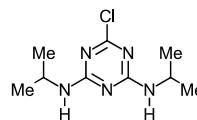
Simazine



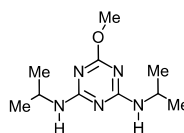
Ametryn



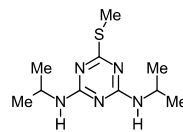
Atrazine



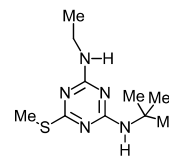
Propazine



Prometon



Prometryn

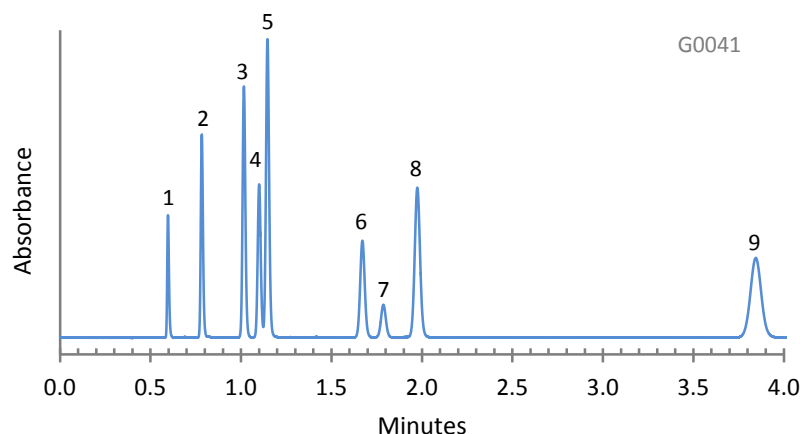


Terbutryn

This triazine pesticides mixture can be rapidly separated on a HALO Fused-Core C18 column while retaining good peak shape and high column efficiency.

Application Note: 59-PU

Separation of Phenyl Urea Pesticides on HALO C18 Phase



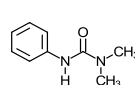
PEAK IDENTITIES:

1. Fenuron
2. Monuron
3. Fluomethuron
4. Isoproturon
5. Diuron
6. Siduron A
7. Siduron B
8. Linuron
9. Neburon

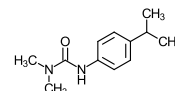
TEST CONDITIONS:

Column: 4.6 x 100 mm, HALO C18
 Part Number: 92814-602
 Mobile Phase: 50/50-A/B
 A= 0.025 M Potassium phosphate buffer, adj. to
 pH = 2.5
 B=Acetonitrile
 Flow Rate: 2.0 mL/min.
 Pressure:300 Bar
 Temperature: 30 °C
 Detection: UV 245 nm, VWD
 Injection Volume: 0.5 µL
 Sample Solvent: Acetonitrile
 Response Time: 0.02 sec.
 Flow Cell: 2.5 µL semi-micro
 LC System: Shimadzu Prominence UFLC XR

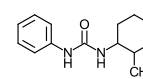
STRUCTURES:



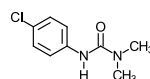
Fenuron



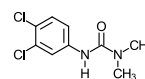
Isoproturon



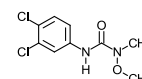
Siduron B



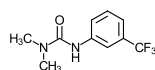
Monuron



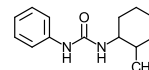
Diuron



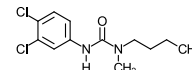
Linuron



Fluomethuron



Siduron A



Neburon

This separation illustrates the use of the highly efficient 2.7 µm HALO Fused-Core C18 stationary phase in the analysis of some popular herbicides. The short run times allow analyses using isocratic conditions so that column equilibration time is not required between runs.