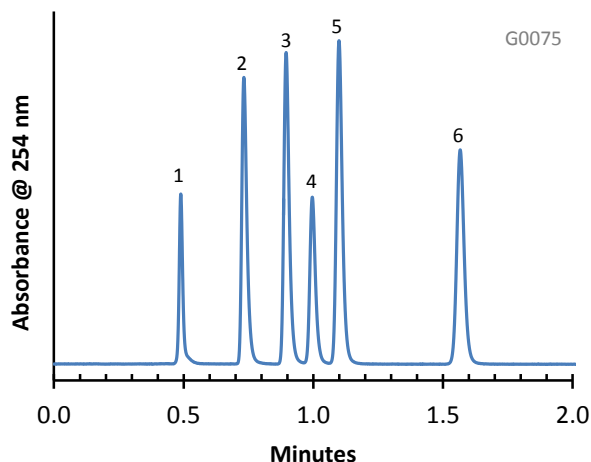


## Separation of Neonicotinoids on HALO 2.7 µm C18



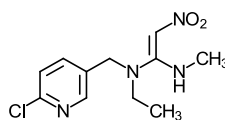
### PEAK IDENTITIES:

1. Nitenpyram
2. Thiamethoxam
3. Clothianidin
4. Imidacloprid
5. Acetamiprid
6. Thiacloprid

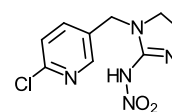
### TEST CONDITIONS:

Column: 3.0 x 100 mm, HALO C18, 2.7 µm  
 Part Number: 92813-602  
 Mobile Phase: 70/30: A/B  
 A= 0.1% Formic acid in water  
 B= Acetonitrile  
 Flow Rate: 0.8 mL/min.  
 Pressure: 252 Bar  
 Temperature: 35°C  
 Detection: UV 254 nm, VWD  
 Injection Volume: 2.0 µL  
 Sample Solvent: 50/50: Water/acetonitrile  
 Response Time: 0.02 sec.  
 Flow Cell: 2.5 µL semi-micro  
 LC System: Shimadzu Prominence UFLC XR  
 ECV: ~14 µL

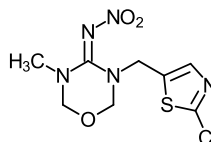
### STRUCTURES:



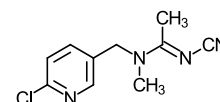
Nitenpyram



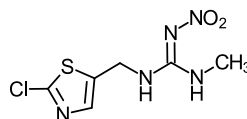
Imidacloprid



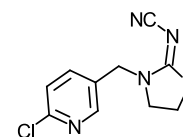
Thiamethoxam



Acetamiprid



Clothianidin



Thiacloprid

Neonicotinoids are systemic insect neurotoxins that have recently been in the news, since this class of pesticides may have negative effects on bees. This application note shows a rapid separation of six neonicotinoids using a Fused-Core, 2.7 µm, HALO C18 column. This superficially porous packing allows high resolution at moderate back pressures.