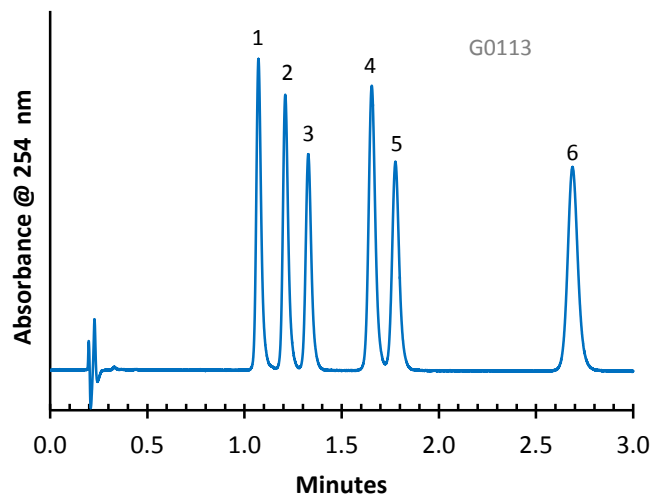


Benzodiazepines Separation on HALO 2 Phenyl-Hexyl



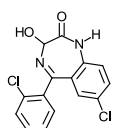
PEAK IDENTITIES:

1. Lorazepam
2. Alprazolam
3. Clonazepam
4. Temazepam
5. Flunitrazepam
6. Diazepam

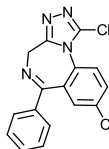
TEST CONDITIONS:

Columns: 2.1 x 50 mm, HALO 2 Phenyl-Hexyl
 Part Number: 91812-406
 Mobile Phase: 62.5/37.5-A/B
 A= Water with 0.1% formic acid/
 10 mM ammonium formate, pH 3.3
 B= 80/20 Acetonitrile/Water with 0.1%
 formic acid/10 mM ammonium formate
 Flow Rate: 0.55 mL/min.
 Pressure: 311 bar
 Temperature: 35 °C
 Detection: UV 254 nm, PDA
 Injection Volume: 0.5 µL
 Sample Solvent: 30/70-water/acetonitrile
 Data Rate: 80 Hz
 Response Time: 0.02 sec.
 Flow Cell: 2 µL micro cell
 LC System: Agilent 1200 SL

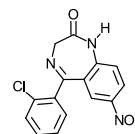
STRUCTURES:



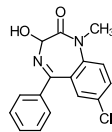
Lorazepam



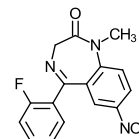
Alprazolam



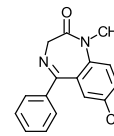
Clonazepam



Temazepam



Flunitrazepam



Diazepam

These six benzodiazepines are baseline resolved on a HALO 2 Phenyl-Hexyl column. The π - π interactions between the Phenyl-Hexyl phase and these anti-anxiety drugs help to enhance the separation.