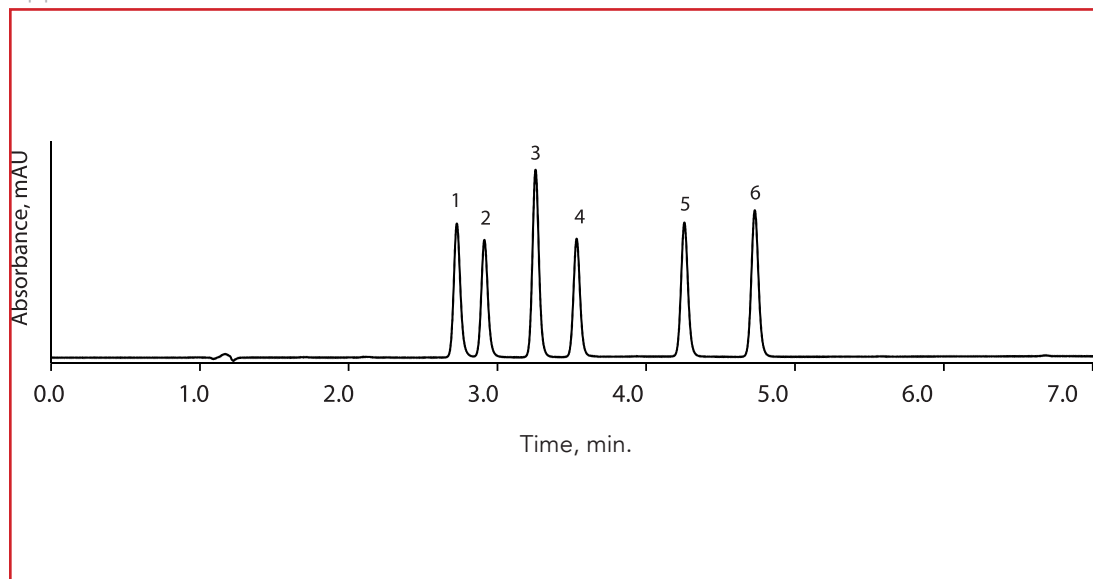




### Separation of Benzodiazepines on HALO® PFP, 5 µm

Application Note 186-BZ



#### PEAK IDENTITIES:

1. Oxazepam
2. Lorazepam
3. Nitrazepam
4. Clonazepam
5. Flunitrazepam
6. Diazepam

Benzodiazepines are a class of compounds known to be minor tranquilizers, which are mainly used to treat anxiety, insomnia, and seizures in people, as well as animals. A separation of six benzodiazepines is performed on a HALO® 5.0 µm PFP column.

#### TEST CONDITIONS:

**Column:** HALO 90 Å PFP, 5 µm,  
4.6 x 100 mm

**Part Number:** 95814-609

#### Mobile Phase:

- A: 25 mM Ammonium acetate, pH 5.5
- B: Acetonitrile

Gradient:	Time (min)	% B
	0.0	36
	7.0	65

**Flow Rate:** 0.75 mL/min

**Pressure:** 46 bar

**Temperature:** 35 °C

**Detection:** UV 254 nm

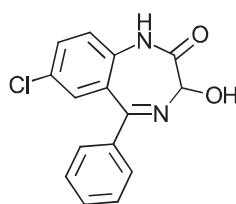
**Injection Volume:** 1.0 µL

**Response Time:** < 0.12 sec

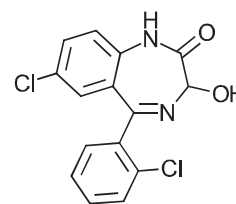
**Flow Cell:** 5.0 µL semi-micro

**LC System:** Agilent 1100

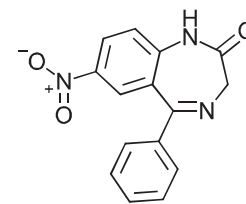
#### STRUCTURES:



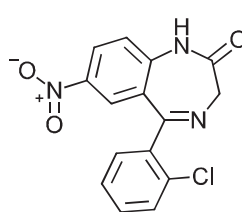
Oxazepam



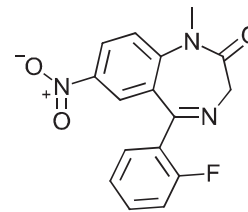
Lorazepam



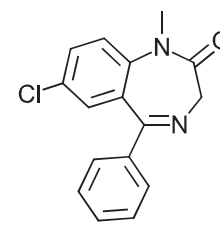
Nitrazepam



Clonazepam



Flunitrazepam



Diazepam

