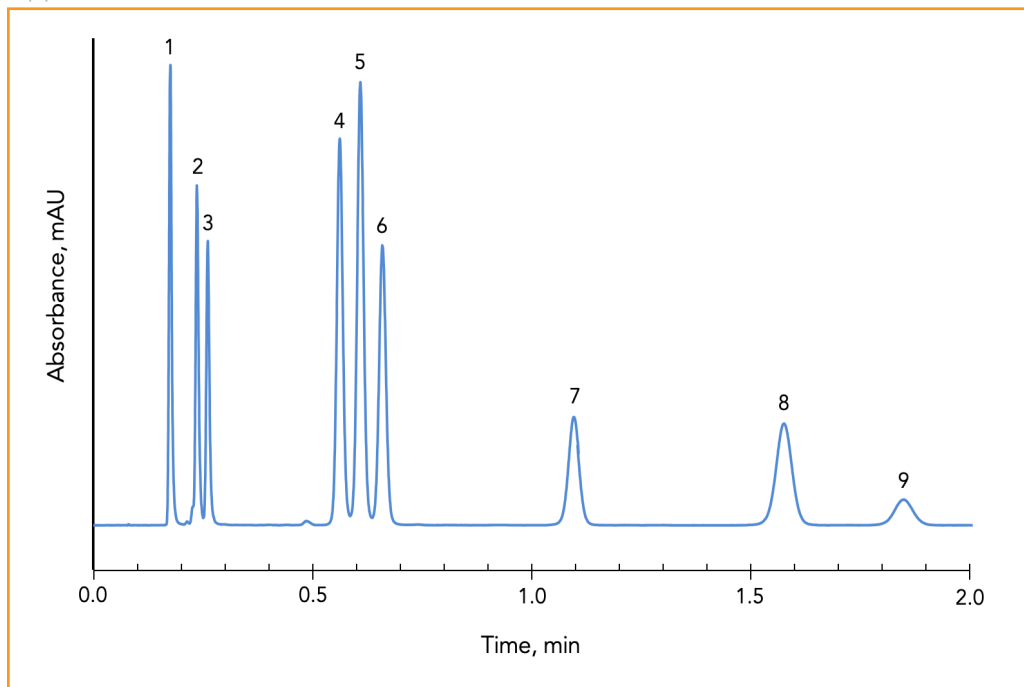




## Isocratic Separation of NSAIDs on HALO® C18

Application Note 13-NS



### PEAK IDENTITIES:

1. Acetaminophen
2. Aspirin
3. Salicylic acid
4. Tolmetin
5. Ketoprofen
6. Naproxen
7. Fenoprofen
8. Diclofenac
9. Ibuprofen

Non-steroidal antiinflammatory drugs (NSAIDs) are commonly used for reduction of pain and inflammation. Here, a mixture of methanol and acetonitrile allow a better isocratic separation of this mixture than either solvent by itself as the modifier.

### TEST CONDITIONS:

**Column:** HALO 90 Å C18, 2.7 μm,  
4.6 x 50 mm

**Part Number:** 92814-402

**Mobile Phase:** 43/57 - A/B

A: 0.02 M sodium phosphate buffer, pH 2.5

B: 50/50 methanol/ACN

**Flow Rate:** 3.0 mL/min

**Pressure:** 338 bar

**Temperature:** 35 °C

**Detection:** UV 254 nm, VWD

**Injection Volume:** 1.0 μL

**Sample Solvent:** 50/50 methanol/water

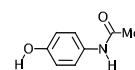
**Response Time:** 0.02 sec

**Flow Cell:** 2.5 μL semi-micro

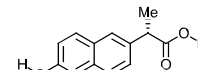
**LC System:** Shimadzu Prominence UFLC XR

**Extra column volume:** ~14 μL

### STRUCTURES:



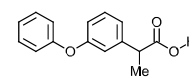
Acetaminophen



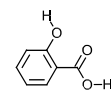
Naproxen



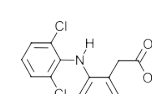
Aspirin



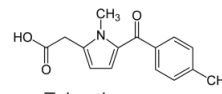
Fenoprofen



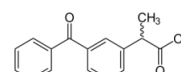
Salicylic acid



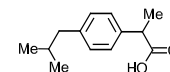
Diclofenac



Tolmetin



Ketoprofen



Ibuprofen

