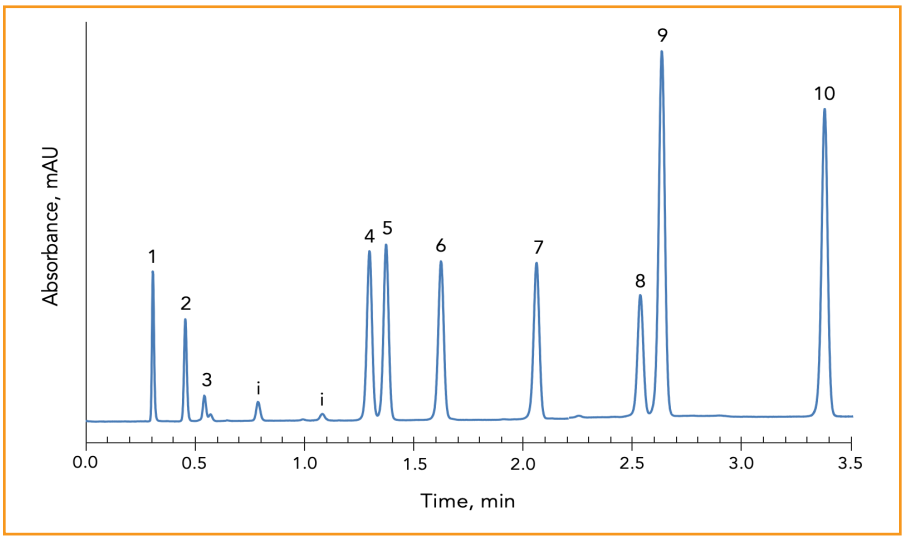
HALO®

PHARMACEUTICALS

Gradient Separation of NSAIDs on HALO® RP-Amide

Application Note 16-NS



PEAK IDENTITIES:

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

i = impurity

Ten non-steroidal anti-inflammatory drugs (NSAIDs) can be separated in under 3.5 minutes using a short HALO® RP-Amide, 2.7 µm packed column.

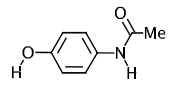
TEST CONDITIONS:

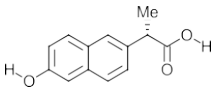
Column: HALO 90 Å RP-Amide, 2.7 µm, 4.6 x 50 mm
Part Number: 92814-407
Mobile Phase: 50/50 - A/B (start)
A: 0.02 M Sodium phosphate buffer, pH 2.5
B: Methanol
Gradient:

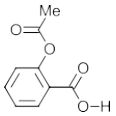
Time (min)	% B
0.0	50
0.1	50
0.5	55
3.5	80
4.0	80

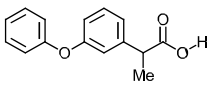
Flow Rate: 2.0 mL/min
Pressure: 289 bar
Temperature: 35 °C
Detection: UV 254 nm, VWD
Injection Volume: 1.0 µL
Sample Solvent: Mobile phase
Response Time: 0.02 sec
Flow Cell: 2.5 µL semi-micro
LC System: Shimadzu Prominence UFLC XR
Extra column volume: ~14 µL

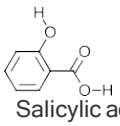
STRUCTURES:

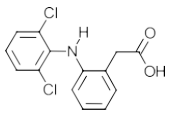

Acetaminophen

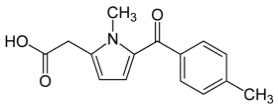

Naproxen

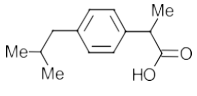

Aspirin

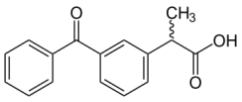

Fenoprofen

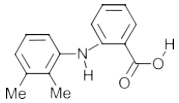

Salicylic acid


Diclofenac


Tolmetin


Ibuprofen


Ketoprofen


Mefenamic acid