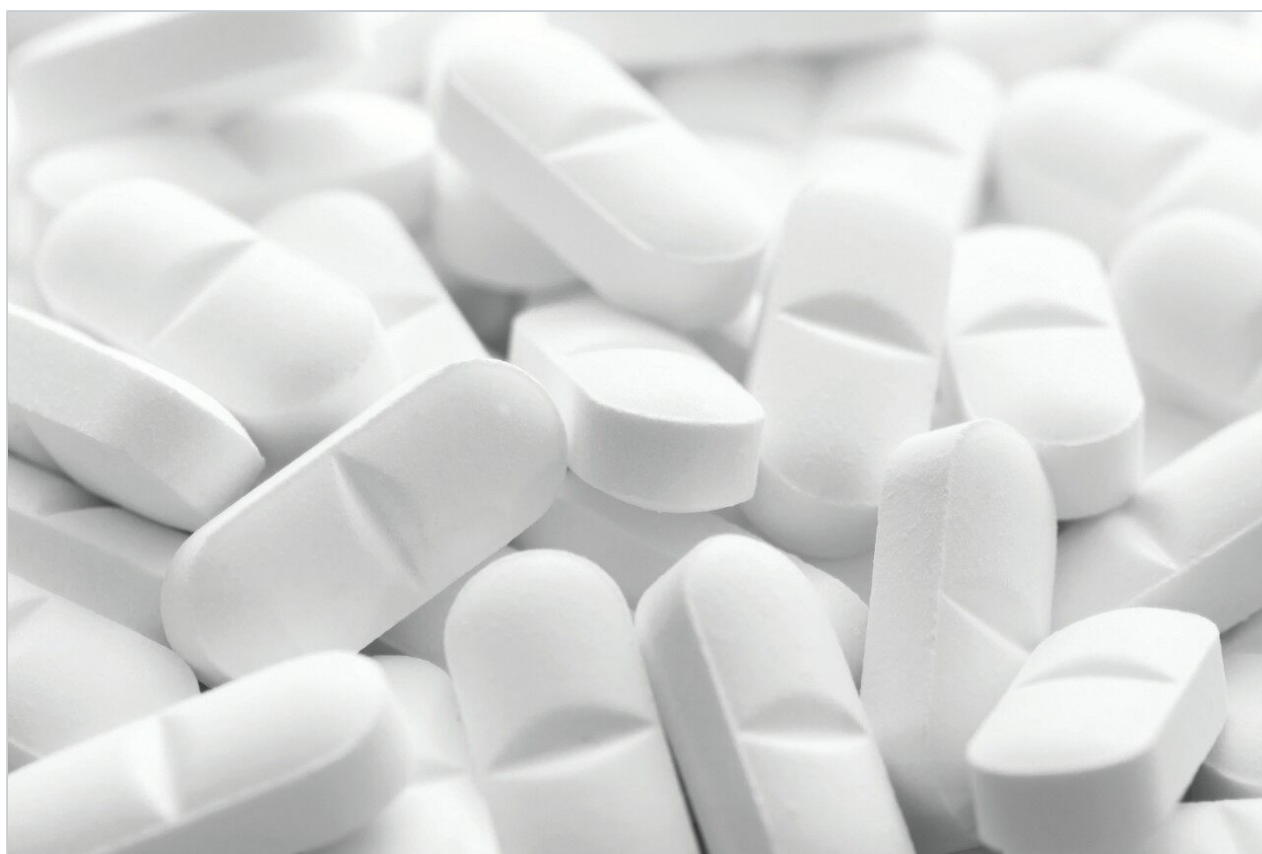


Nota applicativa

## Analysis of Non-Steroidal Inflammatory Drugs (NSAIDs) Using XBridge Phenyl

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Waters Corporation



This is an Application Brief and does not contain a detailed Experimental section.

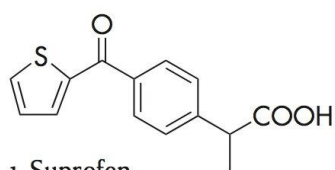
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### Abstract

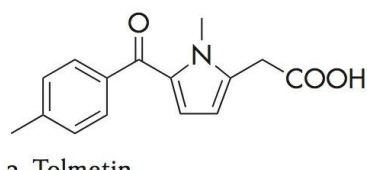
This application brief highlights the analysis of non-steroidal inflammatory drugs using XBridge Phenyl columns.

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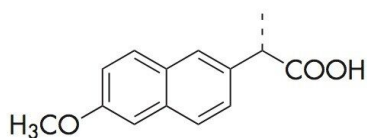
## Introduction



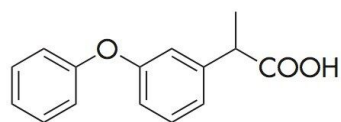
1. Suprofen



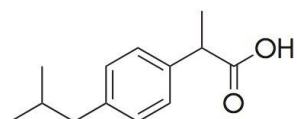
2. Tolmetin



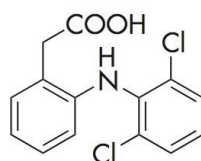
3. Naproxen



4. Fenoprofen



5. Ibuprofen



6. Diclofenac

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## Experimental

### Test Conditions

Columns:

XBridge Phenyl, 4.6 x 100 mm, 3.5  $\mu$ m p/n:  
186003334

Mobile phase A:

H<sub>2</sub>O

|                   |                                                                                                                                                                             |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mobile phase B:   | MeOH                                                                                                                                                                        |
| Mobile phase C:   | 0.2% HCOOH in H <sub>2</sub> O                                                                                                                                              |
| Flow rate:        | 1.0 mL/min                                                                                                                                                                  |
| Injection volume: | 15 µL                                                                                                                                                                       |
| Sample:           | Fenoprofen (50 µg/mL), Ibuprofen (20 µg/mL),<br>Diclofenac (10 µg/mL), Tolmetin (10 µg/mL),<br>Suprofen (10 µg/mL), Naproxen (10 µg/mL) in H <sub>2</sub><br>O/MeOH (60/40) |
| Column temp.:     | 30 °C                                                                                                                                                                       |
| Sampling temp.:   | 15 °C                                                                                                                                                                       |
| Detection:        | UV @ 254 nm                                                                                                                                                                 |
| Sampling Rate:    | 5 points/sec                                                                                                                                                                |
| Filter Response:  | 0.2                                                                                                                                                                         |
| Instrument:       | Alliance 2695 with 2996 PDA                                                                                                                                                 |

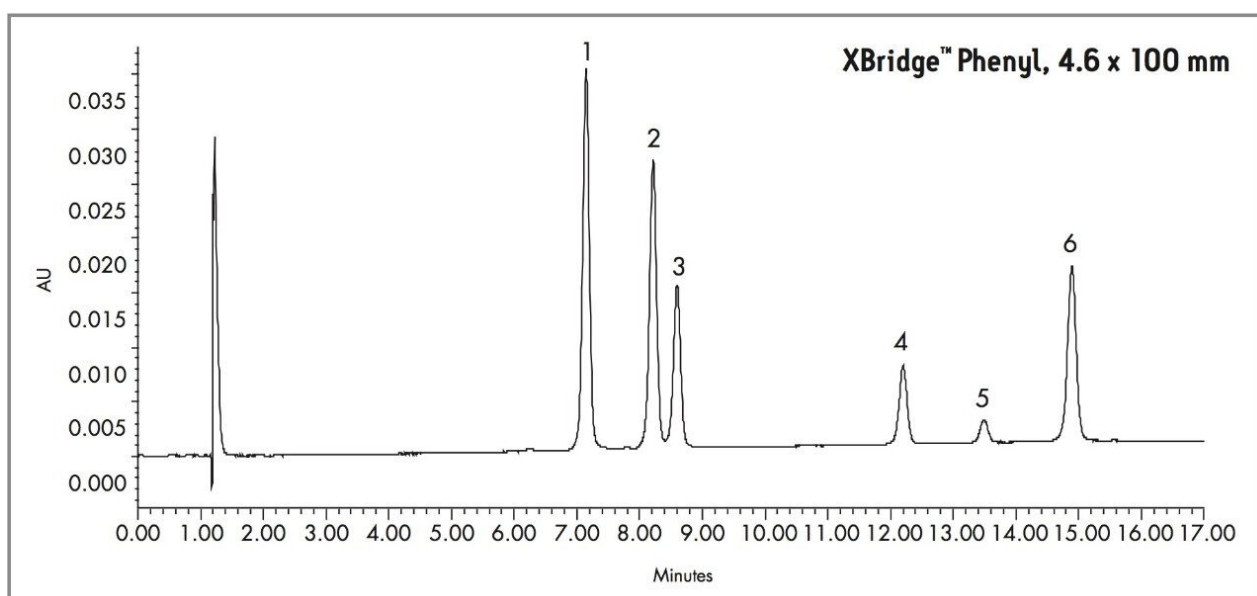
## Gradient

| Time(min) | %A | %B | %C |
|-----------|----|----|----|
| 13.33     | 25 | 65 | 10 |
| 16.67     | 25 | 65 | 10 |
| 17.33     | 40 | 50 | 10 |

| Time(min) | %A | %B | %C |
|-----------|----|----|----|
| 20.00     | 40 | 50 | 10 |

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## Results and Discussion



Compounds: 1. Suprofen 2. Tolmetin 3. Naproxen 4. Fenoprofen 5. Ibuprofen 6. Diclofenac.

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## Featured Products

Alliance HPLC <<https://www.waters.com/514248>>

WA60185, June 2007

