

# WHELK-O<sup>®</sup> 1 CORE

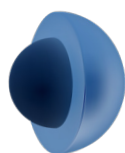
## Chiral Columns



**Enjoy the benefits of faster analyses and greater column efficiencies on a standard HPLC system**

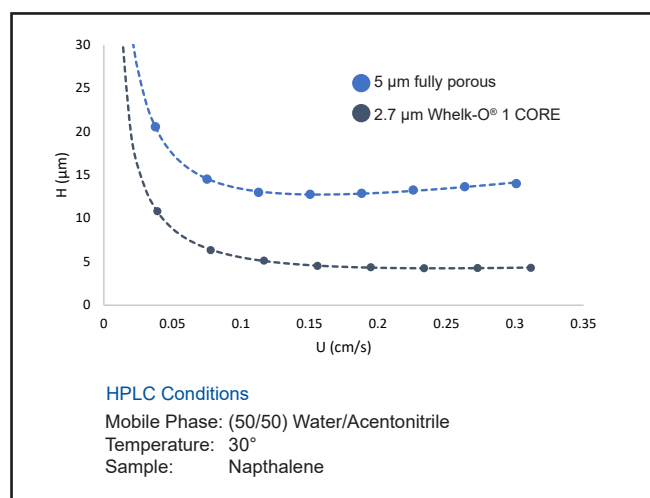
The WHELK-O<sup>®</sup> 1 Core chiral stationary phase is bonded to 2.7  $\mu\text{m}$  core-shell particles for faster, highly efficient separations without increasing system back-pressure. Rapid screening of chiral samples can be performed in a fraction of the time, improving throughput by greater than 3X.

- Faster chiral screening and method development
- Narrower peak widths improve sensitivity and resolution
- Compatible with a broad range of solvents for NPLC, RPLC and SFC
- Available in R,R and S,S configurations allows for peak elution order to be inverted
- Fast delivery—all sizes, anywhere in the world



### What is Core-shell Technology?

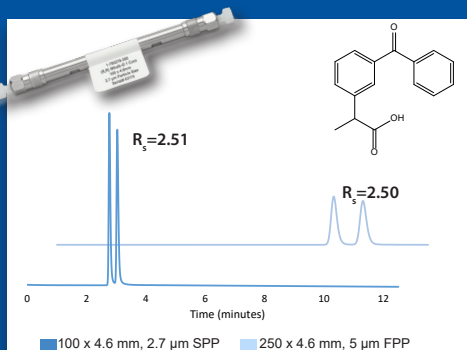
Core-shell particles have a solid silica core, enveloped by a homogenous porous shell. This reduces band broadening and improves efficiency, largely due to more rapid analyte mass transfer – from the mobile phase through the stationary phase and back again. This is because diffusion only occurs in the porous, outer layer of the particle rather than the entire particle. The result is reduced analysis times and higher column efficiencies without generating extreme back-pressures.



WHELK-O<sup>®</sup> 1 Core provides higher column efficiencies than similarly-sized fully porous particles, even at higher mobile phase linear velocities. H vs U curves compare performance of 2.7  $\mu\text{m}$  WHELK-O<sup>®</sup> 1 Core and 5  $\mu\text{m}$  fully porous WHELK-O<sup>®</sup> 1.

## WHELK-O<sup>®</sup> 1 Core reduces analysis time by three-fold without sacrificing resolution

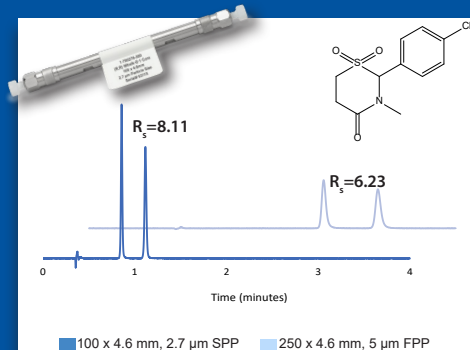
### HPLC Separation of Ketoprofen



#### HPLC Method Conditions

Columns: 100 x 4.6 mm, 2.7  $\mu\text{m}$  WHELK-O<sup>®</sup> 1 Core  
 250 x 4.6 mm, 5.0  $\mu\text{m}$  WHELK-O<sup>®</sup> 1  
 Mobile Phase: 90/10/0.1 Hexane/Ethanol/Acetic Acid  
 Flow Rate: 1.5 mL/min  
 Detection: 254 nm

### SFC Separation of Chlormezanone



#### SFC Method Conditions

Columns: 100 x 4.6 mm, 2.7  $\mu\text{m}$  WHELK-O<sup>®</sup> 1 Core  
 250 x 4.6 mm, 5.0  $\mu\text{m}$  WHELK-O<sup>®</sup> 1  
 Mobile Phase: (70/30) Carbon Dioxide, Methanol  
 Flow Rate: 3.0 mL/min  
 Temperature: 40° C  
 BPR: 150 bar  
 Detection: 220 nm

# WHELK-O<sup>®</sup> 1 CORE

## Chiral Columns



### WHELK-O<sup>®</sup> 1 Core Ordering Information

DIMENSIONS	(R,R) CATALOG #	(S,S) CATALOG #	PARTICLE SIZE	
50 x 2.1 mm	1-780271-300	1-780171-300	2.7µm	
100 x 2.1 mm	1-780272-300	1-780172-300		
150 x 2.1 mm	1-780273-300	1-780173-300		
50 x 4.6 mm	1-780274-300	1-780174-300		
100 x 4.6mm	1-780275-300	1-780175-300		
150 x 4.6 mm	1-780276-300	1-780176-300		
50 x 3.0 mm	1-780277-300	1-780177-300		
100 x 3.0 mm	1-780278-300	1-780178-300		
150 x 3.0 mm	1-780279-300	1-780179-300		
Guard Cartridge Kit (3 pkg)*	1-780280-300	1-780180-300		
Guard Column Holder	1-801010-300	1-801010-300		-

\*Guard holder sold separately

## FREE Chiral Screening Service

### Let Us Find the Best Column for Your Separation

REGIS offers a free chiral screening service with results delivered within three days. Visit [registech.com](http://registech.com) for details, or contact a **REGIS Chromatography Sales expert** to get started today.



To learn more about WHELK-O<sup>®</sup> 1 Core chiral stationary phases or for a personalized quote, contact a REGIS Chromatography Sales expert at [chromsales@registech.com](mailto:chromsales@registech.com).



## Try a REGIS Analytical Column *Risk Free!*

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