

# CHIRAL

## Stationary Phases

Innovative columns from the experts in chiral chromatography.



### PACKED COLUMNS AND BULK MEDIA

- Compatible with SFC & HPLC
- Scale from Analytical to Prep
- Robust Phases for Long Life

# REFLECT™ Polysaccharide Chiral Stationary Phases

Polysaccharide chiral columns are the most widely used type of chiral stationary phases (CSPs) to separate enantiomers. REFLECT™ chiral columns are rugged polysaccharide phases suitable for a wide range of chiral compounds. Unique, proprietary, phase coverage provides excellent peak shape and improved resolution versus leading chiral phases. High resolution greatly improves preparative loading, leading to greater productivity and higher purity separations. Combined with attractive pricing and rapid delivery, REFLECT™ chiral columns deliver the performance and productivity you expect. REFLECT™ columns are available packed with immobilized and coated CSPs.



## Immobilized Phases

- High efficient media with excellent peak shape and loading capacity
- Rugged, for long column lifetimes
- Compatible with a broad range of solvents and separation modes (NP, RP, Polar Organic, SFC)
- Fully scalable from 3- 20µm

## Coated Phases

- High performance media delivers excellent peak shape and resolution
- Compatible with a wide range of solvents and separation modes (normal phase HPLC and SFC)
- Fully scalable from 3- 20µm

## REFLECT™ Phase Characteristics

COLUMN	SELECTOR	EQUIVALENT COMPETITIVE PRODUCTS	USP	PARTICLE SIZES	pH RANGE
REFLECT™ I-Amylose A	Amylose tris(3,5-dimethylphenylcarbamate)	CHIRALPAK® IA, IA-3; LUX® i-Amylose 1	L99	3, 5, 10, 20 µm <sup>#</sup>	2 - 8*
REFLECT™ I-Cellulose B	Cellulose tris(3,5-dimethylphenylcarbamate)	CHIRALPAK® IB, IB-3	N/A		
REFLECT™ I-Cellulose C	Cellulose tris(3,5-dichlorophenylcarbamate)	CHIRALPAK® IC, IC-3; LUX® i-Cellulose 5	N/A		
REFLECT™ I-Cellulose J	Cellulose tris(4-methylbenzoate)	CHIRALPAK® IJ, IJ-3	N/A		
REFLECT™ I-Cellulose Z	Cellulose tris(3-Chloro-4-Methylcarbamate)	Similar to CHIRALCEL® OZ, LUX® Cellulose-2	N/A		
REFLECT™ C-Amylose A	Amylose tris(3,5-dimethylphenylcarbamate)	CHIRALPAK® AD, AD-H, AD-3; LUX® Amylose-1	L51		
REFLECT™ C-Cellulose B	Cellulose tris(3,5-dimethylphenylcarbamate)	CHIRALCEL® OD, OD-H, OD-3; LUX® Cellulose-1	L40		

<sup>#</sup>Select phases available in 10 and 20 µm particle sizes. Contact a Chromatography Sales Representative for more information.  
\*Operating at the upper limit may shorten the column life.

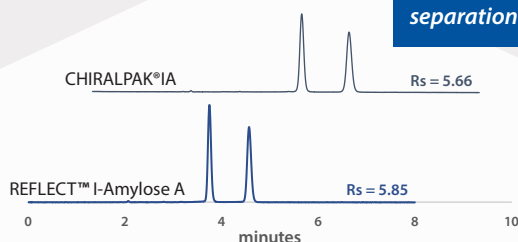
## The REFLECT™ Guarantee

Rely on guaranteed performance  
Try REFLECT™ chiral columns *risk free!*

If an analytical column (≤4.6mm ID) does not provide at least equivalent or better separation as compared to a competing column of the same particle size, phase type, and dimensions, return the column within 45 days for a full refund.

Contact a REGIS Representative for more information

REFLECT™ I-Amylose A  
provides equivalent  
separation of Hydrobenzoin



Compound: Hydrobenzoin      Flow Rate: 1.5 mL/min  
Column Size: 5 µm, 25 cm x 4.6 mm      Detection: UV 220 nm  
Mobile Phase: (80/20) Hexane/Ethanol      REFLECT I-A Catalog #1-591204-300

# WHELK-O<sup>®</sup> 1 Chiral Stationary Phases

1-(3,5-dinitrobenzamido)-1,2,3,4-tetrahydrophenanthrene

Excellent method development column for a wide range of compound classes.

Proprietary WHELK-O<sup>®</sup> 1 columns are covalently bonded for long life and broad mobile phase compatibility, and offer alternative selectivity to polysaccharide chiral column phases. WHELK-O<sup>®</sup> 1 columns are available in analytical and preparative sizes.

- Excellent method development column with applicability to a wide range of compound classes
- Broad range of particle sizes and dimensions for analytical to preparative scale separations
- High loading capacity for excellent scalability in preparative applications
- Choice of enantiomeric phases allows inversion of peak elution order
- 1.8  $\mu\text{m}$  fully porous particles for high efficiency separations in both UHPLC & UHPSFC



# PIRKLE-TYPE Chiral Stationary Phases

Pirkle-Type chiral stationary phases can be used for HPLC or SFC applications and are compatible with both normal and reversed-phase solvents. All Pirkle-Type CSPs are covalently bonded, therefore, the columns can tolerate all commonly used mobile phase combinations and are very durable. All of the Pirkle-Type CSPs are available in both enantiomeric forms.

## $\pi$ -Electron Acceptor / $\pi$ -Electron Donor Phases

- WHELK-O<sup>®</sup> 1
- WHELK-O<sup>®</sup> 2
- ULMO

## $\pi$ -Electron Acceptor Phases

- DACH-DNB
- Pirkle 1-J
- $\alpha$ -Burke 2
- $\beta$ -Gem 1
- Leucine
- Phenylglycine



# CHIROSIL<sup>®</sup> Crown-Ether Stationary Phases

(+) or (-)-(18-Crown-6)-tetracarboxylic acid

- CHIROSIL<sup>®</sup> columns are proven for the separation of amino acids and compounds containing primary amines
- CHIROSIL<sup>®</sup> ME columns are ideal for amino and chiral analysis where greater retention and capacity are needed
- Exhibits excellent durability due to covalent bonding
- Columns available in both enantiomeric forms, which allows for the inversion of peak elution order



## FREE CHIRAL SCREENINGS

Let us find the best column for your compound. Start with a free chiral screening conducted by Regis' experts in chiral separations. Contact us to get started today and receive results in as little as three days!

Visit [chiral.com](http://chiral.com) for technical resources, including hundreds of applications on all REGIS phases.

# Ordering Information



Particle Size	Column Dimensions	WHELK-O®1 (S,S) Catalog#	WHELK-O® 1 (R,R) Catalog#	REFLECT™ I-Amylose A Catalog#	REFLECT™ I-Cellulose B Catalog#	REFLECT™ I-Cellulose C Catalog#	REFLECT™ I-Cellulose J Catalog#	REFLECT™ I-Cellulose Z Catalog#	REFLECT C -Amylose A Catalog#	REFLECT C-Cellulose B Catalog#
3 µm*	50 x 2.1 mm	1-780128-300	1-780228-300	1-591109-300	1-592109-300	1-593109-300	1-594109-300	1-595109-300	1-580109-300	1-590109-300
	100 x 2.1 mm	1-780129-300	1-780229-300	1-591110-300	1-592110-300	1-593110-300	1-594110-300	1-595110-300	1-580110-300	1-590110-300
	150 x 2.1 mm	1-780130-300	1-780230-300	1-591111-300	1-592111-300	1-593111-300	1-594111-300	1-595111-300	1-580111-300	1-590111-300
	50 x 3 mm	1-780126-300	1-780226-300	1-591101-300	1-592101-300	1-593101-300	1-594101-300	1-595101-300	1-580101-300	1-590101-300
	150 x 3 mm	1-780124-300	1-780224-300	1-591105-300	1-592105-300	1-593105-300	1-594105-300	1-595105-300	1-580105-300	1-590105-300
	50 x 4.6 mm	1-780120-300	1-780220-300	1-591107-300	1-592107-300	1-593107-300	1-594107-300	1-595107-300	1-580107-300	1-590107-300
	100 x 4.6 mm	1-780221-300	1-780221-300	1-591102-300	1-592102-300	1-593102-300	1-594102-300	1-595102-300	1-580102-300	1-590102-300
	150 x 4.6 mm	1-780122-300	1-780222-300	1-591103-300	1-592103-300	1-593103-300	1-594103-300	1-595103-300	1-580103-300	1-590103-300
5 µm	50 x 2.1 mm	1-780155-300	1-780255-300	1-591212-300	1-592212-300	1-593212-300	1-594212-300	1-595212-300	1-580212-300	1-590212-300
	50 x 3 mm	1-780159-300	1-780259-300	1-591211-300	1-592211-300	1-593211-300	1-594211-300	1-595211-300	1-580211-300	1-590211-300
	100 x 3 mm	1-780160-300	1-780260-300	1-591214-300	1-592214-300	1-593214-300	1-594214-300	1-595214-300	1-580214-300	1-590214-300
	50 x 4.6 mm	1-780101-300	1-780201-300	1-591201-300	1-592201-300	1-593201-300	1-594201-300	1-595201-300	1-580201-300	1-590201-300
	100 x 4.6 mm	1-780105-300	1-780205-300	1-591202-300	1-592202-300	1-593202-300	1-594202-300	1-595202-300	1-580202-300	1-590202-300
	150 x 4.6 mm	1-780151-300	1-780251-300	1-591203-300	1-592203-300	1-593203-300	1-594203-300	1-595203-300	1-580203-300	1-590203-300
	250 x 4.6 mm	1-780152-300	1-780252-300	1-591204-300	1-592204-300	1-593204-300	1-594204-300	1-595204-300	1-580204-300	1-590204-300
	250 x 10 mm	1-780102-300	1-780202-300	1-591205-300	1-592205-300	1-593205-300	1-594205-300	1-595205-300	1-580205-300	1-590205-300
	250 x 21.1 mm	1-780107-300	1-780207-300	1-591206-300	1-592206-300	1-593206-300	1-594206-300	1-595206-300	1-580206-300	1-590206-300
	250 x 30 mm	1-780103-300	1-780203-300	1-591207-300	1-592207-300	1-593207-300	1-594207-300	1-595207-300	1-580207-300	1-590207-300
	250 x 50 mm	1-780104-300	1-780204-300	1-591208-300	1-592208-300	1-593208-300	1-594208-300	1-595208-300	1-580208-300	1-590208-300
10 µm	150 x 4.6 mm	1-786251-300	1-786703-300	1-591303-300	1-592303-300	1-593303-300	1-594303-300	-	1-580303-300	1-590303-300
	250 x 4.6 mm	1-786615-300	1-786515-300	1-591304-300	1-592304-300	1-593304-300	1-594304-300	-	1-580304-300	1-590304-300
	250 x 10 mm	1-786625-300	1-786525-300	1-591305-300	1-592305-300	1-593305-300	1-594305-300	-	1-580305-300	1-590305-300
	250 x 21.1 mm	1-786635-300	1-786535-300	1-591306-300	1-592306-300	1-593306-300	1-594306-300	-	1-580306-300	1-590306-300
	250 x 30 mm	1-786703-300	1-786709-300	1-591307-300	1-592307-300	1-593307-300	1-594307-300	-	1-580307-300	1-590307-300

\*WHELK-O® 1 packaged with 3.5µm particle size

Particle Size	Column Dimensions	CHIROFIL RCA (+) Catalog #	CHIROFIL SCA (-) Catalog #	CHIROFIL ME RCA (+) Catalog #	CHIROFIL ME SCA (-) Catalog #
5 µm	100 x 3 mm	1-799010-300	1-799010-300	-	-
	100 x 4.6 mm	1-799008-300	1-799108-300	-	-
	150 x 4.6 mm	1-799001-300	1-799101-300	1-788001-300	1-788009-300
	250 x 4.6 mm	1-799002-300	1-799102-300	1-788002-300	1-788010-300
	250 x 10 mm	1-799006-300	1-799109-300	1-788003-300	1-788011-300
	150 x 21.1 mm	1-799003-300	1-799103-300	1-788018-300	1-788024-300
	250 x 21.1 mm	1-799005-300	1-799105-300	1-788004-300	1-788012-300
	150 x 30 mm	1-799033-300	1-799133-300	1-788020-300	1-788026-300
	250 x 30 mm	1-799055-300	1-799155-300	1-788019-300	1-788025-300
10 µm	150 x 4.6 mm	-	-	1-788005-300	1-788013-300
	250 x 4.6 mm	1-799014-300	1-799114-300	1-788006-300	1-788014-300
	250 x 10 mm	1-799020-300	1-799120-300	1-788007-300	1-788015-300
	150 x 21.1 mm	1-799119-300	1-7991165-300	1-788021-300	1-788027-300
	250 x 21.1 mm	1-799004-300	1-799104-300	1-788008-300	1-788016-300
	150 x 30 mm	1-799018-300	1-799118-300	1-788023-300	1-788029-300
	250 x 30 mm	1-799044-300	1-799117-300	1-788022-300	1-788028-300



Try a REGIS column  
*risk free!* Contact a REGIS  
 Chromatography Sales  
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 to get started today!

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