

## Thermo Scientific Synchronis HILIC HPLC Columns

Consistent, predictable separations,  
Column after column, time after time

- Highly pure, high surface area silica
- Zwitterionic bonded phase
- Enhanced retention of polar and hydrophilic analytes
- Excellent reproducibility
- Rapid equilibration
- Rigorously tested to ensure quality

### Specifications

<b>Particle size</b>	5 $\mu\text{m}$	<b>Carbon load</b>	5%
<b>Pore size</b>	100 $\text{\AA}$	<b>Endcapped</b>	–
<b>Surface area</b>	320 $\text{m}^2/\text{g}$	<b>USP classification</b>	–
<b>pH range</b>	2 - 8		

### Enhanced retention of polar and hydrophilic analytes

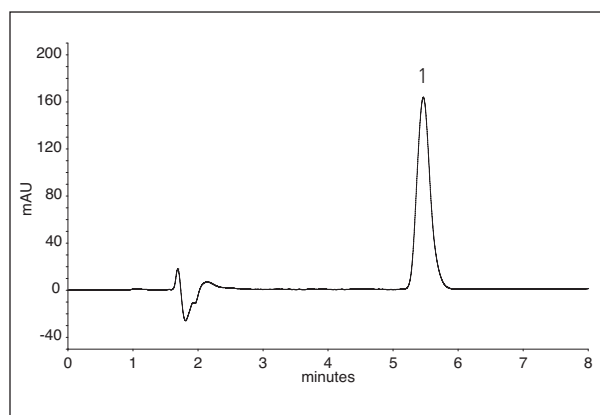
Hydrophilic Interaction Liquid Chromatography (HILIC) is an increasingly popular technique offering complementary selectivity to reversed-phase. With the ability to retain highly polar and hydrophilic compounds, Synchronis™ HILIC columns have been developed to aid the analysis of

compounds that are traditionally difficult to retain using conventional C18 columns.

The zwitterionic modified stationary phase results in total charge equalisation and therefore a neutral (uncharged) but highly polar surface.

Synchronis HILIC columns offer enhanced retention of polar and hydrophilic analytes. Furthermore, the highly organic mobile phase contains low salt levels, making Synchronis HILIC columns ideal for use with electrospray mass spectroscopy.

### Application: Allantoin



Column: Synchronis HILIC, 5 $\mu\text{m}$ , 100mm x 4.6mm

Mobile phase: Ammonium Formate Buffer (pH 3):  
MeCN (10:90)

Flow rate: 1.0 mL/min

Temperature: 30°C

Detection: 210 nm

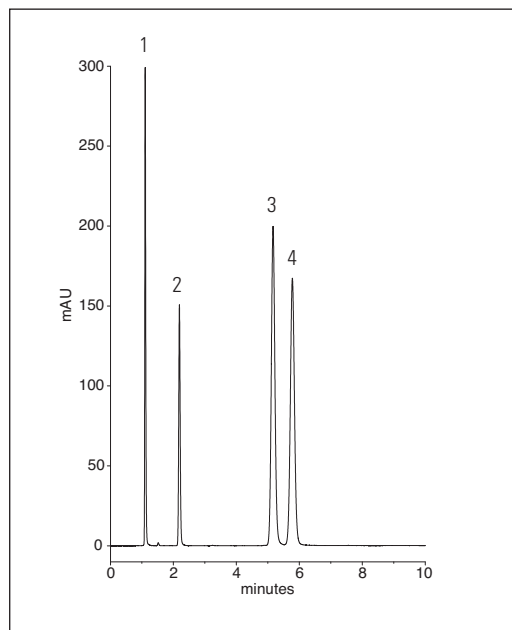
Injection volume: 10  $\mu\text{L}$

1. Allantoin



Description	Particle size	Length (mm)	2.1 mm ID	3 mm ID	4 mm ID	4.6 mm ID
Synchronis HILIC	5 µm	30	97505-032130	97505-033030	97505-034030	97505-034630
		50	97505-052130	97505-053030	97505-054030	97505-054630
		100	97505-102130	97505-103030	97505-104030	97505-104630
		150	97505-152130	97505-153030	97505-154030	97505-154630
		250	97505-252130	97505-253030	97505-254030	97505-254630
Drop-in guard cartridges (4/pk)	5 µm	10	97505-012101	97505-013001	97505-014001	–

## HILIC retention and selectivity



Column: Synchronis HILIC, 5µm, 150mm x 4.6mm

Mobile phase: 100mM Acetate (pH 5):  
Acetonitrile (10:90)

Flow rate: 1.0 mL/min

Temperature: 40°C

Detection: 254 nm

Injection volume: 10 µL

1. Benzophenone
2. Uracil
3. Cytosine
4. Acyclovir

## Consistent, predictable separations, Column after column, time after time

Synchronis HPLC columns are manufactured, packed and tested in ISO9000 accredited facilities. Each lot of silica is tested for the physical properties of the silica support and only released for production if it meets the stringent test specifications.

Each bonded lot of chromatographic packing material is rigorously tested for primary and secondary interactions with the bonded phase.

New, enhanced, automated packing methods drive consistency even further and every column is individually tested to ensure that it meets the required quality.

These extensive testing and quality control procedures ensure the delivery of a consistent product, column after column.

For more information, visit [www.thermoscientific.com/Synchronis](http://www.thermoscientific.com/Synchronis)

©2010 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific Inc. and its subsidiaries. Specifications, terms and pricing are subject to change. Not all products are available in all countries. Please consult your local sales representative for details.

S5CCSSYNCRONISHILIC 0810

**USA and Canada** +1 800 332 3331

**France** +33 (0) 3 88 67 53 20

**Germany** +49 6103 408 0

**Switzerland** +41 56 618 41 11

**United Kingdom** +44 (0) 1928 534 110

**Japan** +81 45 453 9220

**China** +86-21-68654588 or +86-10-84193588

**India** 1800 22 8374 (toll-free)

+91 22 6716 2200

**All Other Enquiries** +44 (0) 1928 534 050

### Technical Support

**North America** +1 800 332 3331

**Outside North America** +44 (0) 1928 534 440

**Thermo**  
SCIENTIFIC