



# HICHROM

Chromatography Columns and Supplies

LC COLUMNS  
Thermo Scientific  
Hypercarb

Catalogue 9

## Hichrom Limited

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## Hypercarb®

- Excellent retention of very polar analytes
- Separates structurally related substances
- pH stable from 0 to 14
- Ideal for high temperature applications

Hypercarb® is a unique Porous Graphitic Carbon (PGC) phase composed of flat sheets of hexagonally arranged carbon atoms, with a fully satisfied valence. The selectivity offered by Hypercarb is different to that of silica and polymeric phases. Hypercarb is ideally suited to the separation of highly polar compounds and compounds with closely related structures, including geometric isomers and diastereomers.

The physical characteristics of the material are different from conventional silica and polymer materials. Hypercarb is totally stable across the entire pH range. It can be used for both normal- and reversed-phase HPLC and is well suited for reversed-phase LC-MS assays as it is stable with any eluent and produces no phase bleed issues. The robust nature of the material ensures a long column lifetime.

Particle Size (µm)	Pore Size (Å)	Pore Volume (cc/g)	Surface Area (m <sup>2</sup> /g)
3, 5, 7	250	0.7	120

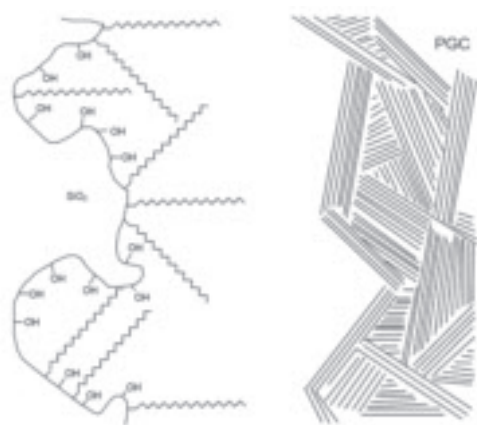


Figure 13. Surface comparison between ODS bonded silica and Porous Graphitic Carbon

Please contact Hichrom for a copy of the Hypercarb Method Development Guide

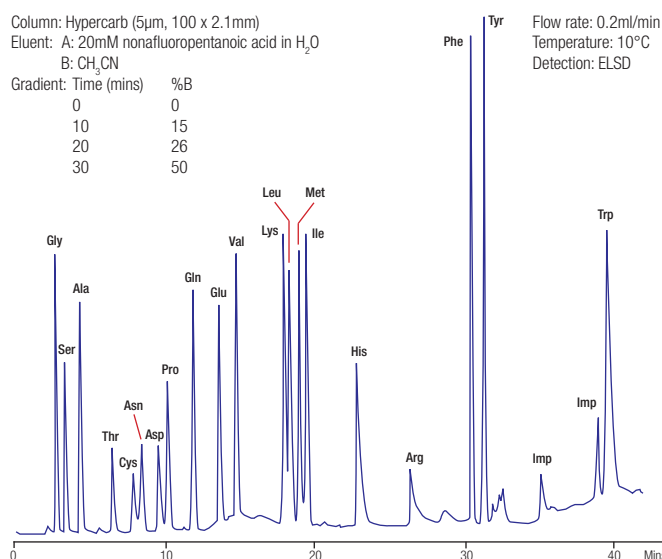


Figure 14. Separation of amino acids on Hypercarb

## Ordering Information

### Hypercarb Phases

Column i.d. <sup>1</sup> (mm)	Column Length <sup>1</sup> (mm)					Drop-In Guard Cartridges (2/pk)
	30	50	100	150	250	
<b>3µm Phase</b>						
2.1	35003-032130	35003-052130	35003-102130	35003-152130	-	35003-012101 <sup>2</sup>
3.0	35003-033030	35003-053030	35003-103030	35003-153030	-	35003-013001 <sup>2</sup>
4.6	35003-034630	35003-054630	35003-104630	35003-154630	-	35003-014001 <sup>3</sup>
<b>5µm Phase</b>						
2.1	35005-032130	35005-052130	35005-102130	35005-152130	35005-252130	35005-012101 <sup>2</sup>
3.0	35005-033030	35005-053030	35005-103030	35005-153030	35005-253030	35005-013001 <sup>2</sup>
4.6	35005-034630	35005-054630	35005-104630	35005-154630	35005-254630	35005-014001 <sup>3</sup>

<sup>1</sup> Hypercarb 7µm and other column dimensions, including capillaries, available

<sup>2</sup> Use with Uniguard direct connect holder 852-00

<sup>3</sup> Use with Uniguard direct connect holder 850-00