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# ULTRASPHERE®

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Optimal surface coverage for long column lifetime

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Narrow particle size distribution for high efficiency and improved resolution

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Highly reproducible

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Wide range of dimensions, particle sizes and bonded phases

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## ULTRASPHERE ACQUIRED BY HICHROM IN 2009

Hichrom acquired the Ultrasphere HPLC column range from Beckman Coulter in October 2009. Based in the UK, Hichrom is a leading European manufacturer and distributor of HPLC columns, consumables and media, with manufacturing facilities accredited by both ISO9001 (Quality) and ISO14001 (Environmental) standards.

Following the acquisition, Hichrom commenced manufacture of Ultrasphere columns and media to the same exacting manufacturing protocols and to identical specifications previously used by Beckman Coulter. Part numbers also remain unaffected by this acquisition.

As the exclusive distributor of Hichrom products in the US, MAC-MOD Analytical is now the sole US supplier of Ultrasphere HPLC columns.

## ULTRASPHERE PHASES

Ultrasphere Phase	Particle Size (µm)	Pore Size (Å)	Encapped
ODS (C18)	3, 5	80	Yes
Octyl (C8)	3, 5	80	Yes
Cyano (CN)	3, 5	80	No
Silica (SI)	3, 5	80	N/A
Ion Pair (IP)	5	80	Yes

Ultrasphere columns remain widely referenced within both industry and academia and are recognized to provide excellent chromatographic performance.

Ultrasphere columns are available in five phases with a 5µm particle size; ODS (C18), Octyl (C8), Cyano (CN), Ion Pair (IP) and unbonded silica (SI). Additionally, ODS (C18), Octyl (C8) Cyano (CN) and unbonded silica (SI) chemistries are available with a 3µm particle size.

Columns are available in a wide range of dimensions, including microbore (2.1mm id), analytical (4.6mm id) and semi preparative (10mm id) options.

## ULTRASPHERE-XL HIGH SPEED CARTRIDGE COLUMNS

In this cartridge design, the guard connects directly to the cartridge column with an integral holder. This integral design minimises the dead volume between guard and cartridge column.



TOLL-FREE: **1.800.441.7508**  
PHONE: **1.610.358.9696**  
FAX: **1.610.358.5993**

E-MAIL: [info@mac-mod.com](mailto:info@mac-mod.com)  
WEB SITE: [www.mac-mod.com](http://www.mac-mod.com)

ADDRESS: **103 Commons Court,**  
**Chadds Ford, PA 19317**

# ULTRASPHERE PARTS & PRICE LIST

## 5µm ANALYTICAL COLUMNS

235329	5µm ODS column	250 x 4.6mm	\$780
235330	5µm ODS column	150 x 4.6mm	\$690
243533	5µm ODS pre column	45 x 4.6mm	\$245
235332	5µm Octyl column	250 x 4.6mm	\$780
235333	5µm Octyl column	150 x 4.6mm	\$690
243532	5µm Octyl pre column	45 x 4.6mm	\$260
244071	5µm Cyano column	250 x 4.6mm	\$780
244070	5µm Cyano column	150 x 4.6mm	\$690
244072	5µm Cyano pre column	45 x 4.6mm	\$260
235341	5µm SI column	250 x 4.6mm	\$750
235342	5µm SI column	150 x 4.6mm	\$690
244011	5µm SI pre column	45 x 4.6mm	\$260
235335	5µm IP column	250 x 4.6mm	\$830
235334	5µm IP column	150 x 4.6mm	\$770
243534	5µm IP pre column	45 x 4.6mm	\$260
240002	5µm ODS-DABS column	250 x 4.6mm	\$780

## 5µm MICRO COLUMNS

244434	5µm ODS column	250 x 2.0mm	\$820
237390	5µm ODS column	150 x 2.0mm	\$690
237396	5µm Octyl column	250 x 2.0mm	\$780
237395	5µm Octyl column	150 x 2.0mm	\$690
237394	5µm Cyano column	250 x 2.0mm	\$780
237393	5µm Cyano column	150 x 2.0mm	\$660
237392	5µm SI column	250 x 2.0mm	\$780
237391	5µm SI column	150 x 2.0mm	\$690

## 5µm SEMI-PREP COLUMNS

235328	5µm ODS column	250 x 10mm	\$1680
244046	5µm ODS column	150 x 10mm	\$1490
235331	5µm Octyl column	250 x 10mm	\$1680
244048	5µm Octyl column	150 x 10mm	\$1490
244073	5µm Cyano column	250 x 10mm	\$1680
235340	5µm SI column	250 x 10mm	\$1680

## 3µm ANALYTICAL COLUMNS

244254	3µm ODS High Speed column	75 x 4.6mm	\$780
244228	3µm Octyl High Speed column	75 x 4.6mm	\$780
237573	3µm Cyano High Speed column	75 x 4.6mm	\$780
237574	3µm SI High Speed column	75 x 4.6mm	\$780

## 3µm XL CARTRIDGE COLUMNS

238370	XL 3µm ODS Starter Set 1 x Cartridge Column (70 x 4.6mm) 2 x guard cartridges 1 x holder		\$1210
237500	XL 3µm ODS Cartridge Column, 70 x 4.6mm		\$610
237520	XL 3µm ODS Guard Cartridge (5mm length, 2/pk)		\$305
238371	XL 3µm Octyl Starter Set 1 x Cartridge Column (70 x 4.6mm) 2 x guard cartridges 1 x holder		\$1210
237501	XL 3µm Octyl Cartridge Column, 70 x 4.6mm		\$610
237521	XL 3µm Octyl Guard Cartridge (5mm length, 2/pk)		\$305
237060	XL Column Holder Assembly		\$360

## TO ORDER OR FOR MORE INFORMATION:

### TO PLACE AN ORDER:

Visit our website at  
mac-mod.com/ultrasphere

Or, call us at 1.800.441.7508

### QUESTIONS?

Call 1.800.441.7508 to speak to  
a chromatography specialist.

Or, write info@mac-mod.com

### ABOUT US

MAC-MOD Analytical specializes in providing HPLC and UHPLC columns to scientists who use this technology for applications as diverse as drug discovery, biotechnology and monitoring environmental contaminants. We choose to provide only the best quality products from the most innovative and respected manufacturers in the business and are committed to providing competent, responsive support to the scientists who use our products.



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