



## ULTRASPHERE® (Hichrom) (Formerly Beckman)

- Spherical porous silica
- 3 and 5µm particle sizes
- Specific ion-pair reversed-phase column
- Widely referenced silica

Ultrasphere®, by Hichrom, is a classical silica which boasts a high performance reputation. In addition to the base silica, four phases (5µm particle size) are available in standard columns - Ultrasphere C8, C18, cyano and IP (ion-pair).

Ultrasphere C8 and C18 are also available as 3µm particle size silicas packed into the XL High Speed Cartridge Columns.

Ultrasphere Phases	Endcapped	Particle Size (µm)	Pore Size (Å)
Silica	-	5	80
C8	Yes	3,5	80
ODS	Yes	3,5	80
CN	No	5	80
IP (C18)	Yes	5	80

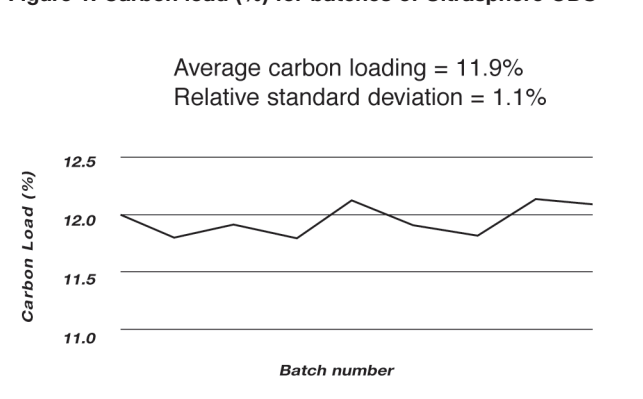
### Batch to batch reproducibility

The reproducibility of batches of Ultrasphere ODS is shown in Figure 1. Resultant columns have minimal selectivity differences (<5%).

### Ultrasphere-XL high speed cartridge column

In this cartridge design, the guard cartridge is directly abutted to the analytical cartridge. This integral design was one of the first of its type to minimize dead volume between the two cartridges.

Figure 1. Carbon load (%) for batches of Ultrasphere ODS



### Ordering Information

Ultrasphere Phases	XL Cartridge Column Dimensions <sup>1</sup> (mm)		Column Dimensions <sup>2</sup> (mm)			
	Analytical	Guard (2pk)	Analytical			Guard
	70 x 4.6	5 x 4.6	150 x 4.6	250 x 4.6	250 x 2.0	45 x 4.6
Silica	-	-	US235342	US235341	US237392	US244011
C8	US237501	US237521	US235333	US235332	US237396	US243532
ODS	US237500	US237520	US235330	US235329	US244434	US243533
CN	-	-	US244070	US244071	US237394	US244072
C18 Ion-Pair (IP)	-	-	US235334	US235335	-	US243534

<sup>1</sup> Use analytical cartridge and guard cartridge in XL holder assembly US237060. Contains 3µm particle size silica.

<sup>2</sup> Contains 5µm particle size silica.