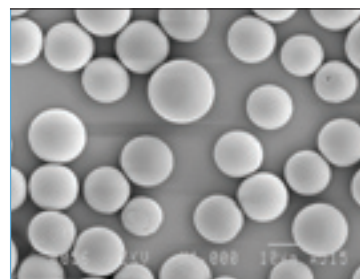
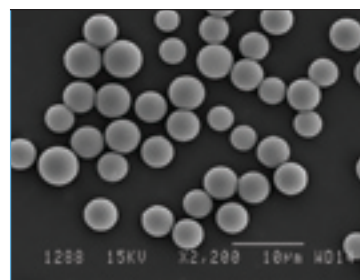


# SILIASPHERE™



# SiliaSphere™ spherical silica gels

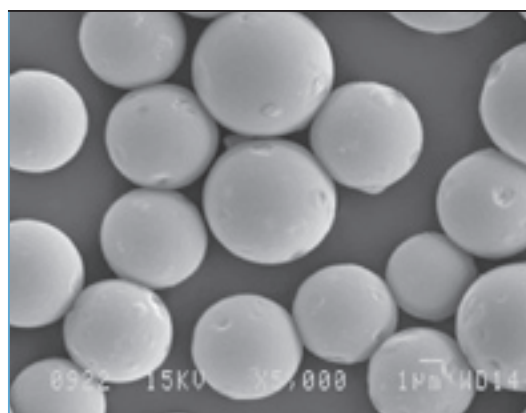
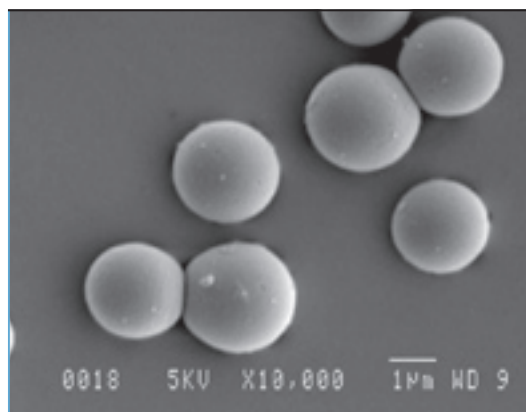
If you require the ultimate in spherical gels for High Performance Liquid Chromatography (HPLC), Supercritical Fluid Chromatography (SFC), Simulated Moving Bed (SMB), Dynamic Axial Compression (DAC), or even Ultra Performance Liquid Chromatography (UPLC), one of our SiliaSphere™ spherical silica gels is your solution. There are two lines of spherical silica gel in this family: SiliaSphere™, which are analytical spherical gels with monodisperse particle size and SiliaSphere™ PC (Preparative Chromatography) which are preparative silica gels with determined particle size ranges. Both these lines are characterized by:

- **Low metal content:** to avoid specific interaction between acid sites and analytes
- **High mechanical stability**
- **Very high purity**
- **Reproducible loadings** (reversed-phase)

The SiliaSphere gels are manufactured from an organic form of silicon (alkoxydes). This ensures very low metal content as the starting material is purified by distillation. Deionized water is used to hydrolyze the silicon alkoxydes. Careful monitoring and control of the parameters that induce precipitation afford spherical silica gels with the desired characteristics.

The spherical family has specific applications in analytical and preparative separation. For preparative and process separation our SiliaSphere™ PC are the most indicated. This high purity material presents an excellent mechanical stability that enables multiple column packing without significant loss. For analytical applications, the SiliaSphere™ material, with its mono-disperse particle size gives the best packing for superior separations. If your chemistry requires a phase not available as standard material, please contact us. All spherical silica gels may be functionalized to suit your needs.

## SiliaSphere™ MONODISPERSE SPHERICAL SILICA GELS



The SiliaSphere™ family is characterized by a very low metal content and exceptionally stable media at low or high pH. The SiliaSphere™ manufacturing process ensures quality and reproducibility in pore size, surface area and particles size and morphology. The high specific surface area enables a high loading capacity with a uniform and reproducible coverage. The SiliaSphere™ materials are the basis for several bonded materials (C8, C18, CN and Phenyl) that are

used in HPLC column manufacturing. These columns are characterized by a long lifetime, high reliability and excellent performance. Many other custom bonded phases are available, see pages 32 to 60 for a complete listing of available functional groups.

The following table presents all the spherical silica supports available and their characteristics.

**SiliaSphere™** spherical silica gels (FORMATS: 100g, 1kg\*)

	Product number	Particles size (µm)	Pore size (Å)	Specific surface area (m <sup>2</sup> /g)
SiliaSphere™	S10003B	3	60	450
	S10005B	5	60	450
	S10007B	10	60	450
	S10008B	15	60	450
	S10001G	1.8	120	340
	S10002G	2.2	120	340
	S10003G	3	120	300
	S10005G	5	120	300
	S10007G	10	120	300
	S10008G	15	120	300
	S10003M	3	300	100
	S10005M	5	300	100
	S10007M	10	300	100
	S10008M	15	300	100
	S10007T	10	1 000	50
	S10008T	15	1 000	50

**SiliaSphere™ C18 Spherical silica gels (FORMATS: 100g, 1kg\*)**

	Product number	Particles size (µm)	Pore size (Å) (bare silica)
Siliasphere™ C18	S33203B	3	60
	S33205B	5	60
	S33207B	10	60
	S33208B	15	60
	S33201G	1.8	120
	S33202G	2.2	120
	S33203G	3	120
	S33205G	5	120
	S33207G	10	120
	S33208G	15	120
	S33203M	3	300
	S33205M	5	300
	S33207M	10	300
	S33208M	15	300
	S33207T	10	1 000
	S33208T	15	1 000

**SILIASPHERE™ PC**  
 (FOR PREPARATIVE CHROMATOGRAPHY)

In preparative and process chromatography the cost is very important and the use of spherical particles with narrow particle size distribution is very expensive. It is possible in this case to use irregular or angular silica but the separation will not be optimal. SiliCycle® has added a very efficient material for preparative chromatography, the **SiliaSphere™ PC** spherical silica gels. These products have a very high chemical and mechanical stability. They also have the advantage to operate with very low backpressures. Furthermore, they are being offered at a very affordable price.

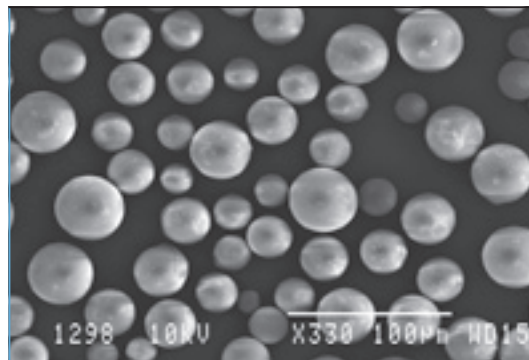
\*All these products are available in different sizes from lab scale to multi-ton scale.

Tel.: 1 418.874.0054 Fax: 1 418.874.0355 Toll-free: 1 877.SILICYCLE (North America only) info@silicycle.com

www.SiliCycle.com

Advantages of using the **SiliaSphere™ PC** materials over standard silica gels:

- Increased efficiency of the eluent's flow characteristics
- Improvement of the resolution between compounds of a sample
- Ease of packing
- Very high specific surface area
- High mechanical stability under higher pressures
- Affordable pricing



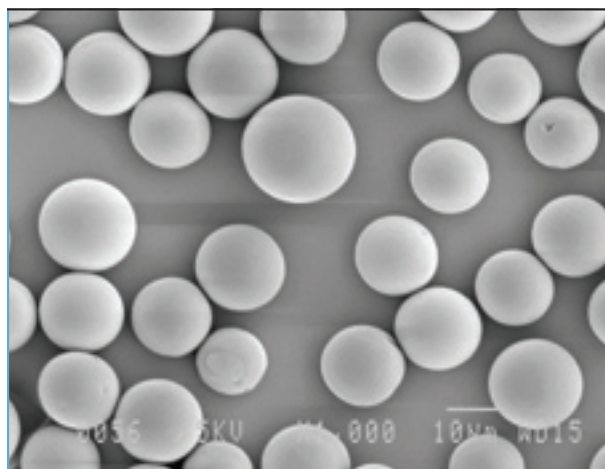
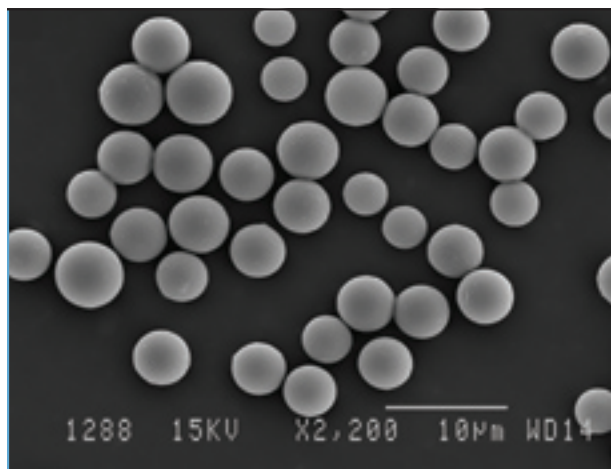
The following table presents the **SiliaSphere™ PC** supports available and their characteristics.

**SiliaSphere™ PC** spherical silica gels (FORMATS: 250g, 1kg\*)

	Product number	Particle size (µm)	Pore size (Å)	Specific surface area (m <sup>2</sup> /g)
SiliaSphere™ PC	S10020C	20-45	70	500
	S10030C	40-75	70	500
	S10040C	75-200	70	500
	S10020E	20-45	100	280
	S10030E	40-75	100	280
	S10040E	75-200	100	280
	S10020M	20-45	300	100
	S10030M	40-75	300	100
	S10040M	75-200	300	100
	S10020T	20-45	1 000	50
	S10030T	40-75	1 000	50
	S10040T	75-200	1 000	50

**SiliaSphere™ PC C18 spherical silica gels** (FORMATS: 250g, 1kg\*)

	Product number	Particle size (µm)	Pore diameter (Å)
Siliasphere™ PC C18	S33220C	20-45	70
	S33230C	40-75	70
	S33240C	75-200	70
	S33220E	20-45	100
	S33230E	40-75	100
	S33240E	75-200	100
	S33220M	20-45	300
	S33230M	40-75	300
	S33240M	75-200	300
	S33220T	20-45	1 000
	S33230T	40-75	1 000
	S33240T	75-200	1 000



\*All these products are available in different sizes from lab scale to multi-ton scale.

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