SOLAS™ Silica Particles

Technical Data Sheet

SOLAS™ is a proprietary process for the world's first monodense, monodisperse fully porous silica particle for applications in chromatography, drug delivery, diagnostics, energy etc. These particles represent the cutting edge in silica technology and are unique in that they combine particle monodispersivity, and monodensity along with and a wide range of pore sizes through Glantreo's Controlled & Stable Porosity (CSP) process. These innovative particles offer seamless bonding and functionalisation capabilities. Additionally, the SOLAS™ particles represent a media that is easier to pack with a reduced failure rate in packing.

Monodispersivity

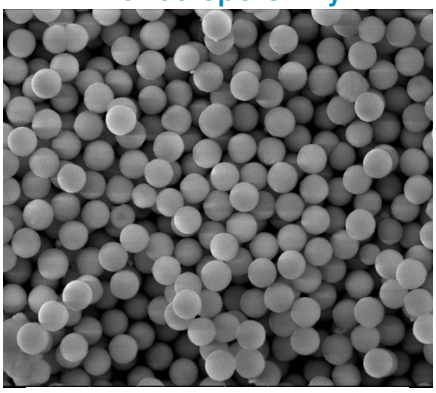
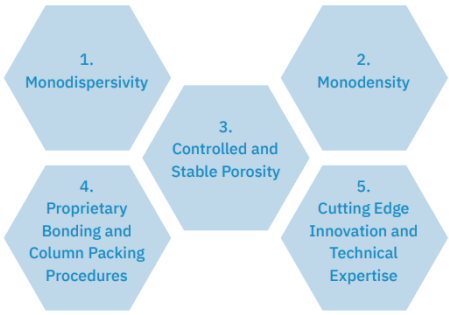


Figure 1: SEM of SOLAS™ 1.9 um



Monodensity

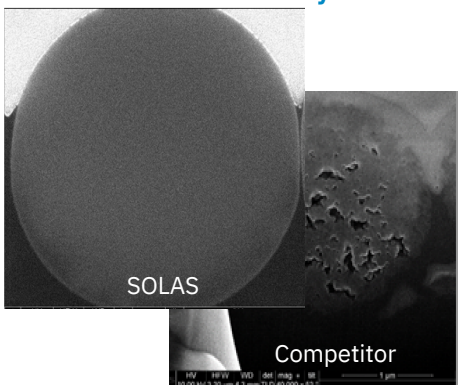


Figure 2: SEM image of FIB – SOLAS™ vs

Figure 1 is an SEM image of SOLAS™ 1.9 um particles, which shows the highly monodisperse nature of SOLAS™ silica. SOLAS™ offers a d90/d10 value of < 1.3.

SOLAS™ particles are monodisperse, monodense and contain a homogeneous pore structure which allows for the efficient transfer of analytes into and out of the silica pore structure, thereby leading to more efficient and effective applications.

Controlled and Stable Porosity

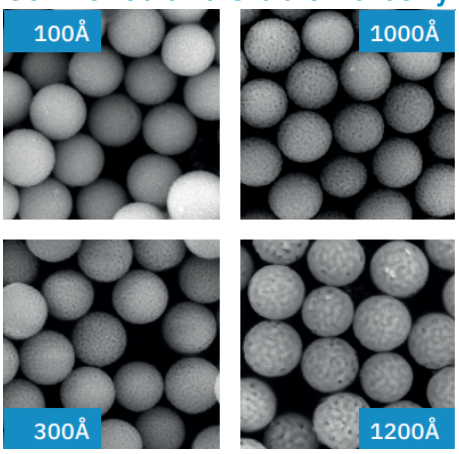


Figure 3: Pore sizes on SOLAS™ 1.7 um particles

Figure 2 illustrates the monodensity of SOLAS™ particles. In contrast, the images of competitors' particles highlight what are often referred to as voids, holes, or macro pores.

Figure 3 shows some of the pore sizes available on SOLAS™ particles. Manufactured with our patented Controlled and Stable Porosity Technology (CSP), SOLAS™ offers unparalleled pore stability, even at larger pore sizes.

What do you want? Raw silica, functionalised silica, fully packed column for white labelling or an opportunity to license the manufacturing technology. Contact us to discuss your options.

Typical Physical Properties	
Particle Sizes	150 nm, 200nm, 350 nm, 500 nm, 750 nm, 1.0 µm, 1.5 µm, 1.7 µm, 1.9 µm, 3 µm, 5 µm
Pore Sizes	20A, 40A, 100A, 500A, 1000A, others available upon request
Functionalisation	Raw Silica, C18, C8, C4, Carboxyl, Streptavidin, Amine, Thiol (others upon request)
Pack Size	5 g +
d90/d10	< 1.3

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