



## **FERROSPHERES-N**

**(MTL/FER/18)**

### **Product Information Sheet**

#### **Introduction**

Microsphere Technology FERROSPHERES™ offer a buoyant alternative to conventional magnetic microparticles used in diagnostics and other affinity-based purifications. Based on a soda-lime borosilicate hollow glass core, the superparamagnetic hollow microspheres float to the surface of aqueous solutions, giving effective target separation in particulate-laden samples. The FERROSPHERES-N surface is functionalised with amine group to facilitate conjugation of ligands such as antibodies.

#### **Material Description**

<b>Shape:</b>	Hollow, thin walled spheres
<b>Composition:</b>	Superparamagnetic surface coating on soda-lime-borosilicate glass
<b>Surface functionality:</b>	Amine
<b>Coupling capacity:</b>	2-4mg rabbit IgG/g
<b>Appearance:</b>	Dry, brown powder
<b>Diameter (average):</b>	18 microns
<b>True density:</b>	<1.0 g/cm <sup>3</sup>
<b>Softening Point:</b>	>750 °C

# Handling Note

## Breakage

The physical integrity of Microsphere Technology FERROSPHERES™ is likely to be compromised if they are subjected to severe physical processing techniques, such as ultrasonication, high-shear mixing, grinding or milling.

Unlike polymer-based microparticulates, Microsphere Technology FERROSPHERES™ do not require aggressive treatments to disperse in solution. Dispersion occurs readily with gentle mixing.

## Storage

Microsphere Technology FERROSPHERES™ will remain as a free flowing powder for at least 18 months from the date of shipment when stored in the original, unopened container.

To maintain the free flowing nature of the product and prevent 'caking', avoid extended exposure of materials to high humidity and/or conditions susceptible to condensation. Once opened, storage life of the product can be maximised by resealing opened containers immediately after use.

The product should be stored in a cool, dry space.

## Safety

Dusting may occur while handling and processing the product. To minimise this effect we recommend the following:

- Open containers only when ready to use
- Open containers and perform manipulations of dry material in a suitable extraction hood or with an appropriate air siphon to hand to pull away airborne particles.
- Use chemical safety goggles for eye protection.

## Additional information

For additional information about Microsphere Technology FERROSPHERES™, or more information about any Microsphere Technology product, please call + 44 (0)131 440 1884.