Pico-Glide™ 1

A novel surface coating agent for enhanced picodroplet performance and stability

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What is Pico-Glide™ 1?

Picodroplet technology is a rapidly growing area of interest and has many potential applications. This technology is particularly important where tests need to be conducted on only a few nanolitres, or picolitres of sample containing, for example, cells or biologically relevant solutions, such as proteins. As a result, picodroplet technology enables scientists to perform thousands to millions of reactions simultaneously.

Pico-Glide™ 1 is a specialised chemical solution containing 0.5% (w/w) functional, fluorous polyether polymer that is chemically reactive to plasma etched glass and polydimethylsiloxane (PDMS) surfaces. After treatment with Pico-Glide™ 1, a uniform and dense fluorophilic layer will covalently bond to the microfluidic channel surfaces of PDMS and glass devices. This fluorophilic coating enhances picodroplet performance and stability, especially when used in conjunction with our Pico-Surf™ surfactant dissolved in fluorous oil.

Why should I choose Pico-Glide™ 1?

- ✓ Ensures improved picodroplet performance and stability.
- ✓ Easy-to-use surface coating agent.
- ✓ Can be used directly, no further manipulation required.
- ✓ Undergoes rigorous QC and QA testing including NMR analysis.
- ✓ Experienced scientific and application support available.

How do I use Pico-Glide™ 1?

1. Take Pico-Glide™ out of freezer, and leave it at room temperature for at least 30 minutes. This will reduce the chance of moisture de-activating Pico-Glide™.
2. Fill a plastic syringe with an aliquot of Pico-Glide™ 1, and attach a needle fitted with Portex Fine Bore Polythene Tubing (ID: 0.38 mm and OD: 1.09 mm).
3. Fill the microfluidic channels with Pico-Glide™ 1 solution using the prepared syringe.
4. Once all microfluidic channels are filled with Pico-Glide™ 1 solution, cover the microfluidic device with a piece of tape (*e.g.* Scotch Magic Tape) to prevent evaporation.
5. Leave the microfluidic device at room temperature for at least 30 minutes.
6. Displace the Pico-Glide™ 1 in the microfluidic channels with neat Fluorinert™ FC-40, or Novec™ 7100.

Storage

Pico-Glide™ 1 should be stored at -20 °C. For long-term storage, wrapping parafilm around the lid is advisable to keep potential contamination and evaporation to a minimum.

Safety Notes

See the Pico-Glide™ 1 Material Safety Data Sheet.

Contact

If you have any queries, please do not hesitate to email us at:

Support@spherefluidics.com

Please mention 'Pico-Glide™' in the subject line.

Accreditation

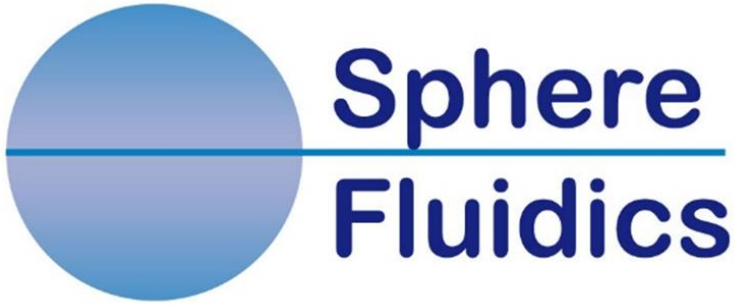
Sphere Fluidics is an ISO9001:2015 accredited company for the provision of Life Sciences products and services.

ISO 9001:2008 Registered Firm	International Accreditation Board
Certificate No. GB2004755	Registration No. 0044/1

Sphere Fluidics Limited

Sphere Fluidics (SF) is an established Life Science Tools company providing unique collaborative services and products for single cell analysis, engineering and isolation. The Company has patented novel biochip systems, including specialist chemicals, which automatically process millions of miniaturised tests in picodroplets (*i.e.* small compartments of a picolitre volume). The technology enables the rapid screening and characterisation of single cells and their products in the search for unique and highly valuable variants among huge cell populations. Sphere Fluidics' versatile technologies assists the discovery and development of new biopharmaceuticals, enzymes, cell therapies and innovative ways to study diseases, such as cancer, auto-immune disorders and infectious diseases, while saving time and reducing costs.

For more information please visit: www.spherefluidics.com.



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