

# Fluo-ST1

Hydrophobic Surface Treatment

This surface treatment reagent from Emulseo is a fluorophilic surface coating agent for enhanced performance and stability of aqueous droplets in fluorinated oils.

#### **ATTENTION**

The product is supplied in a vial filled with argon. It is not advised to open the vial. This poses no safety risk or danger as it is not under pressure. However, the product will quickly deteriorate when in contact with air.

## **OVERVIEW**

The surface treatment from Emulseo is composed of fluoroalkylsilanes that are chemically reactive to plasma etched glass and polydimethylsiloxane (PDMS) surfaces. After treatment, a uniform fluorophilic layer is covalently attached to surfaces of the microfluidic devices. This allows a better performance and stability of aqueous droplets formed in fluorinated oils. Fluo-ST1 is adapted for use with Emulseo's surfactants and oils.

## **BENEFITS**

- Droplet performance and stability improvement.
- Easy-to-use surface treatment.
- Reproducibility of microfluidic experiments.

## **HOW TO USE**

### For best results:

- Fill the contents of the vial in a glass syringe beforehand purged with argon (or any other inert gaz).
- Attach a needle fitted with PTFE tubing.
- Flush the channels with Argon (or any other inert gaz)
- Fill the microfluidic channels with Fluo-ST1 via the tubing and then flush the excess with Argon (or any other inert gaz)
- Place the microfluidic chip in an oven at 65°C overnight.

Fluoroalkylsilanes are extremely reactive, which is why the product is supplied in Argon atmosphere and it is advised to be handled in one.



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# **STORAGE**

The surface treatment from Emulseo can be stored at room temperature in the supplied vial or in a glass syringe purged with argon for six months without deterioration in performance. Change the needle before each manipulation.

# **SAFETY NOTES**



- Wear protective gloves/protective clothing/eye protection/face protection.
- Avoid breathing mist or vapour.

For additional information, see the Material Safety Data Sheet

# **CONTACT**

If you have any queries, please do not hesitate to e-mail us at: contact@emulseo.com

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