

Product number: KS-405

Product name: 370–420 nm Fluorescence Lifetime and Polarization Standard

General Data

Solubility: water, alcohol, DMF, DMSO

Storage: Store in absence of light, desiccated and refrigerate

Description

- Fluorescence lifetime and fluorescence polarization standard for the excitation range between 355 and 400 nm and emission range between 490 and 590 nm.

Applications

- Calibration of fluorescence instrumentation equipped with polarizers for fluorescence polarization measurements.
- Calibration of instrumentation for fluorescence lifetime measurements.

Storage

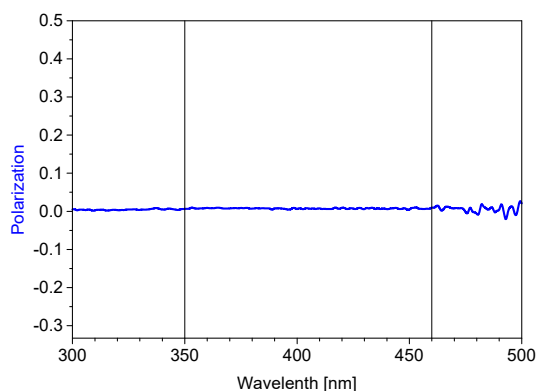
- Refrigerated in absence of light.

Spectral Data

Solvent System	Excitation Range [nm]	Emission Range [nm]	Q.Y. ¹ [%]	Fluorescence Lifetime at 25 °C [ns]	Polarization at 25 °C [mP]
Water	370–420	490–590	80	9.07±0.03 ²	9±3

¹ Excitation at 400 nm.

² **KS-405** in water vs. Ludox, ISS Chronos BH, $\lambda_{ex.} = 370$ nm LED, $\tau = 9.09 \pm 0.01$ ns, $\chi^2 = 1.10$;
KS-405 in water vs. Ludox, ISS Chronos BH, $\lambda_{ex.} = 408$ nm LED, $\tau = 9.04 \pm 0.01$ ns, $\chi^2 = 1.08$.



Excitation Polarization Spectrum of **KS-405** at 25 °C in water. The fluorescence polarization is constant at 9±3 mP

Sample Preparation

The standard is supplied as a solid in a 7 mL vial. The supplied standard is to be dissolved in its original vial with 4 mL of distilled or deionized water. For measurements the solution is then transferred to an optical cuvette using a syringe filter, e.g. 0.45 mm GHP ACRODISC (PALL), (not included). Do not store these solutions for an extended period of time.