

Product number: KS-470

Product name: 436–490 nm Fluorescence Polarization Standard

General Data

- Solubility:** water, alcohol, DMF, DMSO
Insoluble: acetone, chloroform, toluene
Storage: Store in absence of light, desiccated and refrigerate

Description

- Fluorescence Polarization Standard for the range between 436 and 490 nm

Application

- Calibration of fluorescence polarization instrumentation

Advantages

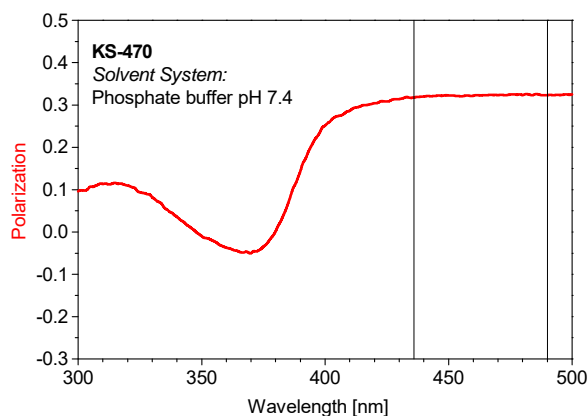
- Suited for excitation with the 436, and 470-nm diode lasers and Argon-ion laser (488 nm)

Spectral Data

Solvent System	Excitation Range [nm]	Emission Range [nm]	Fluorescence Lifetime at 25 °C [ns]	Polarization at 25 °C [mP]
Phosphate buffer pH 7.4 (10 mM)	440–490	515–530	0.21±0.03 ²	321±3

¹Excitation at 400 nm

² **KS-470** in water vs. (Me)₂POPOP, ISS Chronos FD, λ_{ex} = 370 nm LED, τ_{mean} = **0.24 ns**, χ² = 1.13



Excitation Polarization Spectrum of **KS-470** measured at 25 °C in phosphate buffer pH 7.4. The fluorescence polarization remains constant at $P = 321 \pm 3$ mP between 436 nm and 490 nm

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.