**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 490–590 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**

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<tbody>
<tr>
<td>Water</td>
<td>370–420</td>
<td>490–590</td>
<td>80</td>
<td>9.07±0.031</td>
<td>9±3</td>
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</table>

1 Excitation at 400 nm.  
2 KS-405 in water vs. Ludox, ISS Chronos BH, \( \lambda_{ex} = 370 \text{ nm} \) LED, \( \tau = 9.09±0.01 \text{ ns} \), \( \chi^2 = 1.10 \);  
KS-405 in water vs. Ludox, ISS Chronos BH, \( \lambda_{ex} = 406 \text{ nm} \) LED, \( \tau = 9.04±0.01 \text{ ns} \), \( \chi^2 = 1.08 \).

![Excitation Polarization Spectrum of KS-405 at 25 ºC in water. The fluorescence polarization is constant at 9±3 mP](image)

**Sample Preparation**

The standard kit containing 4 vials of the standard is supplied as a solid in a 5 mL vial. The standard is to be dissolved in its original vial with 4 mL of distilled or deionized water. For measurement it is recommended to transfer the solution to an optical cuvette using a syringe nano-filter (e.g. 0.45 mm GHP ACRODISC (PALL), not included). Do not store these solutions for an extended period of time.