Starna Fluorescent Reference Materials

1. 6BF Set – Fluorescent Wavelength references

Consists of six polymer blocks containing seven fluorescent compounds whose spectra cover a broad spectral range with emission maxima from 330 to 582nm and excitation maxima from 290 to 562 nm. This wide spectral range enables the user to select a reference material with broadly similar spectral properties to those of the analyte, ensuring a reasonable spectral overlap and measurable signals without changing important parameters such as slit widths and wavelength settings.

These materials may be used on a routine basis to calibrate and monitor the performance of Fluorescence Spectrophotometers. They are very stable and convenient to use and with reasonable

Sample Number	Compound	Approximate Molar Conc	Excitation Wavelength	Emission Wavelength
1	Anthracene	1 x 10-5	360	402
1	Napthalene	6 x 10-5	290	330
2	Ovalene	2 x 10-7	342	482
3	p-Terphenyl	5 x 10-7	295	338
4	Tetraphenylbutadiene	3 x 10-7	348	422
5	Compound 610	1 x 10-6	440	475
6	Rhodamine	2 x 10-7	562	573

treatment, will remain usable for many years.

For the corrected spectra of the above materials please see:
http://www.starna.com/ukhome/d_ref/f_ref/flou_correct.html

2. Quinine Sulphate – Certified Fluorescent Intensity Reference

Use: Excitation at 347.5nm; Emission Intensity values across 375 nm to 675 nm

Solutions prepared from NIST 935A and provided in permanently flame-sealed cuvettes.

Can be supplied either as a single reference (RM-QS), with a perchloric acid blank (RM-QS00), as a three reference (4QS) linearity set (1,50 and 100 mgl-1) , or as a five reference (6QS) linearity set (1, 20, 50, 80 and 100 mgl-1).

Produced in our ISO 17025 & ISO Guide 34 accredited laboratory and traceable to NIST.

3. 3/Q/10/Water - Water Raman cell

Usable range: 350 to 500nm

Permanently heat-fused sealed far UV quartz cuvette containing high purity water. Provides a measurement capability of the Raman band of water (Excitation usually at 350 nm - although this reference can be used in the range 350-500nm with associated corresponding peak shift). This information used by instrument manufacturers to calculate the Signal-to-Noise (S/N) ratio, and thereby the 'general health' of a spectrofluorometer.

4. Rhodamine 101 – Front surface spectral correction (Rhodamine B Quantum Counter Method)

Usable range: 220-600nm

High concentration of Rhodamine 101 in an organic solvent, designed to provide unity quantum conversion, i.e. one-to-one excitation to emission so that this reference can be used to calculate spectral response factors, and thereby 'corrected' spectra. This design used by several instrument manufacturers for this purpose.

5. New Range of Wavelength references

Starna are continuing to expand the range of references available, and have also added Starna Fluorescent Green and Starna Fluorescent Red to the rang e of available materials – please ask for more details!

Starna Scientific Ltd
52/54 Fowler Road, Hainault, Essex, IG6 3UT
Tel: +44 (0) 208 501 5550; Fax: +44 (0) 208 501 1118
Email: sales@starna.com; Web: www.starna.com