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'Setting the Standard'

Quality Assurance in the Analytical Laboratory

Starna Quantum Yield Reference

Starna Rhodamine 101 Solution Cell

Purpose

Used to determine the fluorescence quantum yield of a substance.

Description and Discussion

Solution of Rhodamine 101 in ethanol, sealed by heat fusion in to a high quality far-UV fluorometer cell, and supplied with an ethanol blank cell

The fluorescence quantum yield of a sample (Φ_F) is the ratio of photons absorbed to photons emitted through fluorescence. This reference has a quantum yield of 1.0 at 25°C. By measuring the fluorescence emission of a sample with similar absorbance characteristics as the reference, and under the same conditions of measurement, the quantum yield of the sample can be determined.

The excitation range for this material is approximately 460 to 600 nm; and the emission range is approximately 550 to 700 nm. For most instrumental setups a working excitation wavelength of 535 nm is suitable.

The blank-corrected absorbance of this solution is below the level recommended in the literature to avoid internal filter effects.

Certification and Documentation

STARNA warrants that all its Reference Materials have been produced in accordance with ISO17034. The ISO 17034 compliant certificate supplied states that the Reference Material has the required stability and homogeneity characteristics and is fit for its intended use.



Accreditation

Starna Scientific is accredited to both ISO 17034 as a Reference Material producer, and ISO/IEC 17025 as a Calibration Laboratory for optical reference measurements. Starna Scientific's manufacturing facility is accredited to the ISO 9001 Quality Management System with BSI. For details see www.starna.com/accreditations.

How to Order

CATALOGUE NUMBER

Starna Rhodamine 101 Quantum Yield reference

RM-RH101



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