

Zenith Polymer® Wavelength Standard

COMPOSITION, PROPERTIES, CALIBRATION, APPLICATIONS

SphereOptics new **Zenith Polymer®** Wavelength Standard is the ideal choice for testing your systems in terms of wavelength accuracy in the spectral range of UV/Vis/NIR. The rare earth oxide doped Zenith Polymer® has characteristic peaks which can be assigned spectrally.

Due to their chemical properties, **Zenith Polymer®** Wavelength Standards are characterized by inert behavior and extreme durability, which makes them ideal for calibrating optical devices.

COMPOSITION

Zenith Polymer® Wavelength Standards are made in Germany. The basis is purest PTFE doped with the rare earth oxides of Holmium, Erbium and Dysprosium. The standards have a stable spectrum of characteristic peaks over the UV/Vis/NIR range because of the special structure of their electron shell, which makes them a perfect tool for wavelength calibrations.

PROPERTIES

Due to the chemical properties of PTFE, **Zenith Polymer®** Wavelength Standards are unpolar, hydrophobic, and inert. The standards are very durable and easy to use in a Laboratory and Production environment.

CALIBRATION

Zenith Polymer® Wavelength Standards are purchased with a calibration file in 0,1 nm resolution over the wavelength range of UV/Vis/NIR from 250 to 2450 nm. The NIST/PTB traceable calibration is performed on PerkinElmer Lambda 19/950 spectrometers.

APPLICATIONS

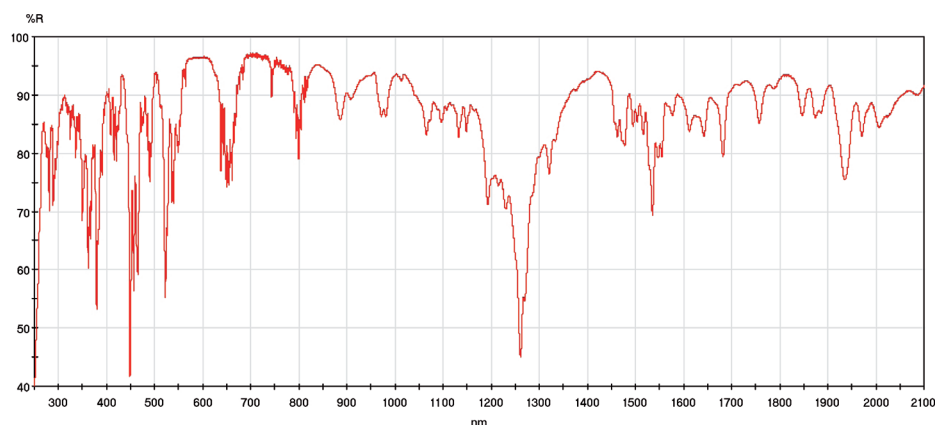
Testing of wavelength accuracy of:

- Spectrometers
- Spectrophotometers
- Spectrofluorometers
- Industrial standards for Biomedicine, Pharmaceutical-, Textile- and Paper industry



OPTICAL PROPERTIES:

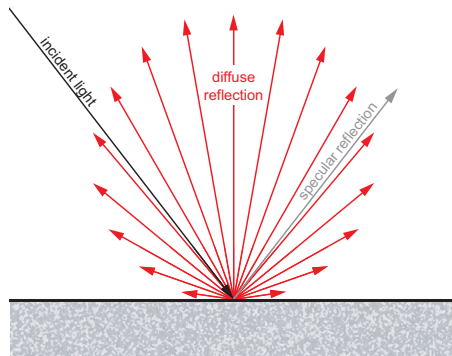
- Certified calibration on PerkinElmer Lambda 19/950 Spectrometer, NIST/PTB traceability
- Useable in vacuum
- Stable spectra with discrete peaks over the range from 250 to 2450 nm
- Nearly perfect lambertian diffuse reflection



Typical spectrum of Zenith Polymer® Wavelength Standard in the range of 250 to 2450 nm.

CHEMICAL AND MECHANICAL PROPERTIES:

- Unpolar, hydrophobic
- Chemically inert
- Operating temperature - 5 to + 65 °C
- Rel. Humidity 10 to 90 %



Nearly ideal diffuse, lambertian reflectance within the range of 250 to 2450 nm.

ZENITH POLYMER® WAVELENGTH STANDARDS

Wavelength standard consisting of mixed rare earth oxides,
Calibrated¹ for the UV/Vis/NIR range or uncalibrated

Order-No. calibrated	Order-No. uncalibrated	Description
SG 3333	SG 3333-U	Wavelength standard, 50 mm diameter Rare earth oxides into Zenith Polymer (Holmium, Erbium, Dysprosium)
SG 3334	SG 3334-U	Wavelength standard, 30 mm diameter Rare earth oxides mixed into Zenith Polymer (Holmium, Erbium, Dysprosium)

¹ Calibration will be performed on a Perkin Elmer Lambda 19 or 950, data will be supplied electronically in 0,1 nm steps, 50 nm step printed documentation with NIST/PTB traceability with certificate for the 250-2450 nm range.



DELIVERY TIME within 2-5 days.

For further information on our products please get in contact with us directly.



... your Partner in Lighting Technology!

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