

## Discover how we can improve your instrumentation and supply chain experience today!

## **KO | BRINGING QUALITY INTO FOCUS**

www.knightoptical.com | Tel: +1 401 583 7846 | Fax: +1 401 583 7851 Knight Optical (USA) LLC | 1130 Ten Rod Road, Suite D102 | North Kingsdown RI 02852 USA www.knightoptical.com | Tel: +44 (0) 1622 859444 | Fax +44 (0) 1622 85955 Knight Optical (UK) Ltd | Roebuck Business Park | Harrietsham | Kent ME17 1SB UK

## Dichroic colour filters for Fluorescence Microscopy and Spectroscopy

Need to measure the fluorescent properties of a component with your Spectrometer but you feel like something's missing?

Maybe it's **Knight Optical** range of <u>Stock Dichroic Filters</u>, ideal for use within <u>Fluorescence Microscopy</u> and Spectroscopy.

For Fluorescence Microscopy and Spectroscopy, dichroic filters are used as beam splitters within the microscope system. They are used as an edge filter at a tilted angle of incidence (typically 45°) to direct the illumination of an excitation frequency towards the sample of interest, and then at an analyser to reject the same excitation frequency but passes a particular emission frequency.

Dichroic filters offer superior contrast between transmitted and reflected wavelengths; having negligible absorption. Having a dielectric coating they are perfect for high power applications and they do not show the strong fluorescence of certain glass filters.

We hold a massive inventory of <u>Bandpass</u>, <u>Long pass</u>, <u>Short pass</u>, <u>Band-blocking</u> and <u>Colour-correction filters</u>.

- Stock sizes of 12.5mm and 25mm diameter; and 50x50mm squares x 1mmthk.
- 425mmdia stock sheets are kept in stock for your specific requirements.
- Custom shapes and sizes at short notice, in most cases turned around within 1 week.
- Coated on Borofloat substrates for excessive thermal shock applications.
- Alternative thickness substrates available.

## .Typical specs:

Material: Borosilicate or equivalent, Sodalime

Diameter Tolerance: +0.0/-0.20 mm Length/Width Tolerance: +/- 0.25mm +/-0.20mm

Wavelength Range: 300nm-1200nm dependant on type

Wavelength Accuracy: +/- 5nm

**Transmission:** Tmax=95% dependant on type and substrate

All our Dichroic Filters are fully inspected on their quality in our ISO 9001 certified, state-of-the-art Metrology laboratory, using our Varian Cary 5000 spectrophotometers which are fitted with a UMA. This allows us to work to the highest QA standards and meet the tolerance specifications on these precision components.

<u>Contact our technical sales team</u> to discover how Knight Optical's high quality Dichroic Filters and superior service can improve your instrumentation and supply chain experience.

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- View our QA and metrology information
- Watch our <u>Corporate Video</u>
- <u>View Our Corporate Brochure</u>