

1 | We have the objective to achieve the national and international rules of regularisation and standardisation, as Good Laboratory Practice (GLP) or ISO 9000-9004. The performance of spectrophotometers must be checked at regular intervals. In this way, the periodic verification of the well operation of the spectrophotometers is an essential component to guarantee the quality of any protocol to assure the precision in the results

2 | The calibration secondary standards that are presented here will let you prove the accuracy in the measuring of the spectrophotometer in relation to the absorbance in the visible spectro's range and the wave-length in the visible range and ultraviolet. Each filter is settled in a casing that is compatible with the cell holder of 1 cm that is in most of the spectrophotometers and it is presented with a Certificate with the absorbance information and the wave-length.

HJG - Individual filters

► Grey glass filters



1 | Grey glass filters to verification of photometry accuracy (absorbance) in the visible range (440 nm to 635 nm).

2 | The grey glass filters show a quite constant transmission along the visible spectro being calibrated in different wave-length.

3 | The thickness of the glass filter has been adjusted to give nominal absorbance values from 0.25 A, 0.5 A and 1 A.

Code	Description	Nom.absorbance	Absorbance values
HJG003	Neutra density filter, F2	0.25 A	440, 465, 546, 590, 635 nm
HJG004	Neutra density filter, F3	0.5 A	440, 465, 546, 590, 635 nm
HJG005	Neutra density filter, F4	1 A	440, 465, 546, 590, 635 nm

► Didimium glass filter



1 | Solid filter to verification of the wave-length precision in the visible rank and UV (from 329 nm to 875 nm) and for verification of the photometric accuracy.

Code	Description	Peak position	Nom.absorbance	Absorbance values
HJG001	Didimio (F5)	279, 361	0.5 to 340 nm	440, 465
		453 536, 368		546, 590, 635 nm

► Filter's set



1 | It includes a Holmium oxide glass filter (HO203) for wave-length accuracy verification and 3 glass filter with neutral density for photometric accuracy verification. All together, with an empty filter mount in a wood case.

2 | The absorbance and wave-length values for the peaks are registered in the calibration certificate that goes with each filter set. A copy of these values, for ordinary use, is in the internal part of the case lid.

Code	HJG007		
Composed of			
Filter	Description	Absorbance measure at	
F1	Holmium oxide	279, 364, 454, 536, 638 nm	
F2	Grey glass density	440, 465, 546, 590, 635 nm	
F3	Neutra density filter	440, 465, 546, 590, 635 nm	
F4	Neutra density filter	440, 465, 546, 590, 635 nm	

► Accesories

Code	Description
HJG002	Empty filter mount
HJG006	Empty case