

Specification

Physical and chemical properties

PCE

Photofilter Grey Filter

PHOTOFILTER

Sortiment:

Graufilter 25	Grey Filter 25	D 1025
Graufilter 50	Grey Filter 50	D 1050

The subsequent properties are based primarily upon the measuring results of the very latest standards and measuring methods, which are defined in corresponding "Measuring and Test Procedures".

We retain the right to change the data in keeping with the latest technical standards.

Non-toleranced numerical values are reference values of an average production quality.

Values marked with \diamond do not apply to the type of glass or no values are available.

Requirements deviating from these specifications must be defined in writing in a **customer agreement**.

Date of release: 7 March 2005

Form 0050/7A

Specification		PCE	
Physical and chemical properties		Photofilter Grey Filter 25	
1.	Optical properties		
1.1	Refractive index		
		n_e	1.522
1.2	Transmittance data		
1.2.1	Spectral transmittance $t(l)$		
1.2.1.1	$t(l)$ - curve		
	Plot of spectral transmittance $t(l)$ for $d = 2.0 \text{ mm}$ ($l = 340 \text{ nm to } 800 \text{ nm}$)		see annex
1.2.2	Luminous transmittance t_{vD65} in % ($d = 2.0 \text{ mm}$)		25.0 ± 1.0
1.3	Colour		
1.3.1	Visual evaluation		\diamond
1.3.2	Colorimetry		
	The Chromaticity coordinates (colour locus) are referred to the Standard Illuminant D_{65} according to CIE 2°-observer for $t_{vD65} = 25.0 \%$	x	0.320
		y	0.340
2.	Thermal properties		
2.1	Viscosities and corresponding temperatures		
	Softening point in °C ($h = 10^{7.6} \text{ dPas}$)		788
2.2	Transformation temperature T_g in °C		591
2.3	Coefficient of thermal expansion a		
2.3.1	Coefficient of mean linear thermal expansion $a(20 \text{ °C}; 300 \text{ °C})$ in 10^{-6} K^{-1} (static measurement)		9.1
3.	Mechanical properties		
3.1	Density r in g/cm^3 (annealed at 40 °C/h)		2.48
4.	Chemical properties		
4.1	Hydrolytic resistance acc. to DIN ISO 719		
		Hydrolytic class	HGB 4
	Equivalent of alkali (Na_2O) per gram of glass grains in mg/g		419

Specification		PCE	
Physical and chemical properties		Photofilter Grey Filter 50	
1.	Optical properties		
1.1	Refractive index		
		n_e	1.520
1.2	Transmittance data		
1.2.1	Spectral transmittance $t(l)$		
1.2.1.1	$t(l)$ - curve		
	Plot of spectral transmittance $t(l)$ for $d = 2.0 \text{ mm}$ ($l = 340 \text{ nm to } 800 \text{ nm}$)		see annex
1.2.2	Luminous transmittance t_{vD65} in % ($d = 2.0 \text{ mm}$)		50.0 ± 1.0
1.3	Colour		
1.3.1	Visual evaluation		\diamond
1.3.2	Colorimetry		
	The Chromaticity coordinates (colour locus) are referred to the Standard Illuminant D_{65} according to CIE 2°-observer for $t_{vD65} = 50.0 \%$	x	0.319
		y	0.335
2.	Thermal properties		
2.1	Viscosities and corresponding temperatures		
	Softening point in °C ($h = 10^{7.6} \text{ dPas}$)		797
2.2	Transformation temperature T_g in °C		608
2.3	Coefficient of thermal expansion a		
2.3.1	Coefficient of mean linear thermal expansion		
	$a(20 \text{ °C}; 300 \text{ °C})$ in 10^{-6} K^{-1} (static measurement)		9.2
3.	Mechanical properties		
3.1	Density r in g/cm^3 (annealed at 40 °C/h)		2.48
4.	Chemical properties		
4.1	Hydrolytic resistance acc. to DIN ISO 719		
		Hydrolytic class	HGB 4
	Equivalent of alkali (Na_2O) per gram of glass grains in mg/g		344

Specification Physical and chemical properties	PCE Photofilter Grey Filter
5. Electrical properties	disregard
6. Other properties	disregard
7. Annex (diagrams, curves)	

Form 0050/7B

Annex 1.2.1.1

Specification

Physical and chemical properties

PCE
Photofilter Grey Filter

Spectral Transmittance

Type of Glass: Photofilter Grey Filter

Thickness: 2.00 mm

Grey Filter 50 ———
Grey Filter 25 ———

