

Technical data

Filter - Acrylic			
	Test	Unit	Values
Mechanical properties:			
Tensile strength	DIN 53455	N/mm ²	65-68
Compressive strength	DIN 53454	N/mm ²	125
Flexural strength	DIN 53452	N/mm ²	120
Impact strength	DIN 53453	N/mm ²	12
Modulus of elasticity	DIN 53457	N/mm ²	3.000
Elongation at break	DIN 53455	%	3-4
Hardness	DIN 53456	N/mm ²	175
Thermal properties:			
Heat stability - Vicat, clear 3 mm	DIN 53460	°C	115
Forming temperature		°C	150-170
Coefficient of linear thermal expansion	VDE 0304	mm/m°C	0.08
Specific heat		kJ/kg K	1.46
Thermal conductivity		W/m K	0.186
Electric properties:			
Dielectric strength	DIN 53481	kV/mm	40
Volume resistivity	DIN 53482	ohm cm	10 ¹⁵
Dielectric constant	DIN 53483		3.4
Dissipation factor	DIN 53483		0,06
Other properties:			
Specific gravity	DIN 53479	g/cm ³	1.18-1.19
Water absorption	at 20° C in 24 h	%	0.17
Light transmission (clear)	450 nm	%	92
Flame class rating clear 3 mm	UL94		HB
Refractive index			1.41

Dimensions:
1500x1000 mm.

Standard thickness:
0.5 - 0.8 - 1.0 - 1.5 - 2.0 - 2.5 - 3.0 mm.
Other thicknesses available upon request.

Standard tolerances:
Thickness:
+/- 0.2 mm
Length/width:
+/- 0.2 mm.
(machining).
Special tolerances available upon request.

Standard colours:
More than 60 different colours. Apart from contrast filters, we also produce infra-red filters & diffusion filters (backlighting). VFD-filter, LCD-filters, EMC-filters, diffusion and reflection filters. Special colours manufactured to customer's specifications.