

## Average physical properties of ALFAPLAS

Test method : ASTM Properties	ASTM	clear transparent value	3 mm unit
Specific gravity	D 792-60 T	1.19	
Optical			
Refractive index	D 542-50	1.49	
Light transmittance	D 1003-61		
#parallel		92	%
#total		93	%
#haze		1	%
Mechanical			
Tensile strength	D 638-61 T		
Rupture		760	kg/cm <sup>2</sup>
Modulus of elasticity		3x10 <sup>4</sup>	kg/cm <sup>2</sup>
Elongation at rupture		4.5	%
Flexural strength	D 790-63		
Rupture		1,050	kg/cm <sup>2</sup>
Modulus of elasticity		3x10 <sup>4</sup>	kg/cm <sup>2</sup>
Compressive strength	D 695-63 T		
Yield		1,260	kg/cm <sup>2</sup>
Modulus of elasticity		3x10 <sup>4</sup>	kg/cm <sup>2</sup>
Shear strength	D 732-46	630	kg/cm <sup>2</sup>
Impact strength	D 256-56		
Izod notched		2.0	kg ·cm/cm
Rockwell hardness	D 785-62	M 100	
Thermal			
Hot forming temperature		140-180	°c
Heat distortion temperature			
2°C/min -264 psi.	D 648-56	100	°c
Maximum recommend continuous Service temperature		85	°c
Coefficient of thermal expansion	D 696-44	7 x 10 <sup>-5</sup>	CM/CM/°c
Coefficient of thermal conductivity		5 x 10 <sup>-4</sup>	cal/cm*sec.°c
Specific heat		0.35	cal/gr.°c
Electrical			
Surface resistivity (28 °c,75 % rh)		>10 <sup>16</sup>	ohm
Volume resistivity	D 257-61	>10 <sup>16</sup>	ohm cm
Dielectric strength , short time test	D 149-64	20	kv/mm
Miscellaneous			
Flammability	D 635-63	33	mm/min.
Water absorption (wt. gain o Immersion for 24 hrs.)	D 570-63	0.3	%
Odor		none	
Taste		none	

Note: The value mentioned above were determined using "ALFAPLAS" clear transparent 3 mm sheet as standard.

Properties may vary depending on the thickness or colors of that particular material.

These values are typical but not guaranteed.