

Polycarbonate UV2 Product Details

1.1 Technical data about polycarbonate

	Value	Unit	Standard	
Mechanical properties				
Yield stress (50 mm/min)	63	MPa	ISO 527	
Stress at break (50 mm/min)	70	MPa	ISO 527	
Yield strain (50 mm/min)	6	%	ISO 527	
Strain at break (50 mm/min)	120	%	ISO 527	
Tensile modulus (1 mm/min)	2350	MPa	ISO 527	
Impact properties				
Charpy V-notched impact strength	+23°C	75	kJ/m^2	ISO 179/1eA
	-30°C	15	kJ/m^2	ISO 179/1eA
Izod notched impact strength	+23°C	70	kJ/m^2	ISO 180/1A
	-30°C	12	kJ/m^2	ISO 180/1A
Physical properties				
Density	1,2	g/cm^3	ISO 1183	
Water absorption (23° C; saturation)	0,35	%	ISO 62	
Moisture absorption (23° C; 50% RH)	0,15	%	ISO 62	
Water vapor permeability (23°C;85% RH;0,1mm)	15	$\text{g}/(\text{m}^2 \text{ 24h})$	ISO 15106-1	
Thermal properties				
Coefficient of linear thermal expansion (23°C÷55°C)	0,65	$10^{-4}/\text{K}$	ISO 11359-2	
Thermal conductivity	0,20	$\text{W}/(\text{m K})$	ISO 8302	
Vicat softening temperature (50N; 120°C/h)	145-149	°C	ISO 306	
<i>TYPICAL VALUES REFERRED TO POLYCARBONATE AS RAW MATERIAL</i>				