

Technical Data Sheet

PETG

Advantages

- Outstanding thermoforming characteristics, particularly in deep draw applications
- Does not usually require drying prior to thermoforming
- Good impact resistance
- Clear
- Lower cost alternative to polycarbonate
- Less brittle than acrylic
- Superior chemical resistance when compared with many other transparent plastics
- Easy to fabricate
- Allows for rapid thermoforming cycle times
- Brake formable (up to 0.080 thickness)
- FDA compliant grades available

	Test Method	Units	Guide Values
General			
Density	ISO 1183-1	g/cm ³	1.27
Moisture absorption			
after storage in standard climate 23 °C/ 50 % r. F.	ISO 62-4	%	0.2
after storage in water at 23 °C until saturation	ISO 62-1	%	0.6
Refractive index @ 20 °C	ISO 489	-	1.567
Mechanical Properties			
Tensile stress at yield	ISO 527-2/1B/50	MPa	> 45
Elongation at yield	ISO 527-2/1B/50	%	4
Tensile strength	ISO 527-2/1B/50	MPa	> 45
Elongation at break	ISO 527-2/1B/50	%	> 35
Elastic modulus	ISO 527-2/1B/1	MPa	2020
Limiting flexural stress	ISO 178	MPa	ca. 80
Impact strength Charpy, unnotched	ISO 179/1fU	kJ/m ²	no break
Impact strength Charpy, notched	ISO 179/1eA	kJ/m ²	ca. 7
Impact strength Izod notched	ISO 180/1A	kJ/m ²	ca. 6
Thermal Properties			
Vicat softening temperature	ISO 306	°C	80
Thermal conductivity	DIN 52612	W/m K	0.2
Coefficient of linear thermal expansion	DIN 53752-A	mm/m K	0.05
Heat deflection temperature under load			
Method A: 1.80 MPa	ISO 75-2	°C	63
Method B: 0.45 MPa	ISO 75-2	°C	70
Electrical Properties			
Dielectric strength	IEC 60243-1	kV/mm	16.1
Volume resistivity	IEC 60093	Ohm·cm	1015
Surface resistivity	IEC 60093	Ohm	1016
Dielectric constant at 10 ³ Hz	IEC 60250		2.6
Dielectric constant at 10 ⁶ Hz	IEC 60250		2.4
Dissipation factor at 10 ³ Hz	IEC 60250		0.005
Dissipation factor at 10 ⁶ Hz	IEC 60250		0.02

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