TECHNICAL DATA SHEET

Arnitel® PL381-H

Envalior

TPC

Processing

Injection molding

Delivery Form

Pellets

Special Characteristics

Heat stabilized or stable to heat

Product Text

Product Information

Injection Molding, Heat Stabilized

ISO 18064 TPC-ET

Processing/Physical Characteristics	Value	Unit	Standard
Melt volume-flow rate, MVR	32	cm³/10min	ISO 1133
Temperature	230	°C	
Load	2.16	kg	
Molding shrinkage, parallel	1.55	%	ISO 294-4, 2577
Molding shrinkage, normal	1.75	%	ISO 294-4, 2577

Mechanical Properties	Value	Unit	Standard
Charpy impact strength, +23°C	N	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	N	kJ/m²	ISO 179/1eU
Charpy notched impact strength, +23°C	N	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	N	kJ/m²	ISO 179/1eA
Tensile notched impact strength, +23°C	179	kJ/m²	ISO 8256/1
Stress at 10% elongation	4	MPa	ISO 527
Stress at 100% elongation	8	MPa	
Stress at 300% elongation	11.8	MPa	ISO 527
Strain at break TPE	>300	%	ISO 527
Stress at break TPE	14	MPa	ISO 527

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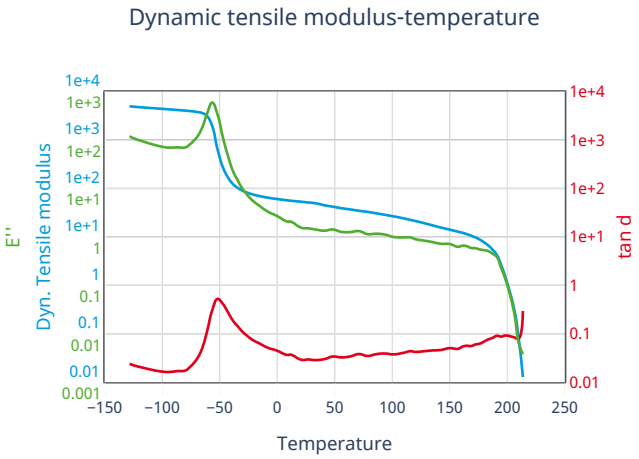
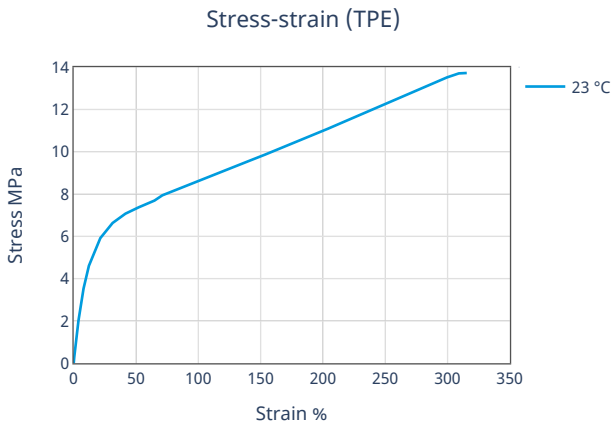
Thermal Properties	Value	Unit	Standard
Melting temperature, 10°C/min	212	°C	ISO 11357-1/-3
Glass transition temperature, 10°C/min	-60	°C	ISO 11357-1/-2
Coeff. of linear therm. expansion, parallel	150	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	150	E-6/K	ISO 11359-1/-2

Electrical Properties	Value	Unit	Standard
Relative permittivity, 100Hz	4.7		IEC 62631-2-1
Relative permittivity, 1MHz	4.4		IEC 62631-2-1
Dissipation factor, 100Hz	310	E-4	IEC 62631-2-1
Dissipation factor, 1MHz	810	E-4	IEC 62631-2-1
Volume resistivity	1E12	Ohm*m	IEC 62631-3-1
Electric strength	20	kV/mm	IEC 60243-1
Comparative tracking index	600		IEC 60112

Other Properties	Value	Unit	Standard
Water absorption	7	%	Sim. to ISO 62
Humidity absorption	0.4	%	Sim. to ISO 62
Density	1160	kg/m³	ISO 1183

Diagrams





Processing Information

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Injection Molding Recommendations
Steel recommendations for molds screws and barrels
Trouble shooting guideline for injection molding