TECHNICAL DATA SHEET

Arnitel® CM551

Envalior

TPC

Processing

Injection molding, Other extrusion

Special Characteristics

Heat stabilized or stable to heat

Delivery Form

Pellets

Features

Copolymer

Product Text

Product Information

Heat Resistant Copolyester

ISO 18064 TPC-ES

Processing/Physical Characteristics	Value	Unit	Standard
Melt volume-flow rate, MVR	8	cm³/10min	ISO 1133
Temperature	230	°C	
Load	2.16	kg	

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	6	kJ/m²	ISO 179/1eA
Shore D hardness	51		ISO 7619-1
Stress at 10% elongation	12	MPa	ISO 527
Stress at 100% elongation	16	MPa	
Strain at break TPE	>300	%	ISO 527
Stress at break TPE	34	MPa	ISO 527
Compression set at 70 °C, 24h	42	%	ISO 815

Thermal Properties	Value	Unit	Standard
Melting temperature, 10°C/min	205	°C	ISO 11357-1/-3

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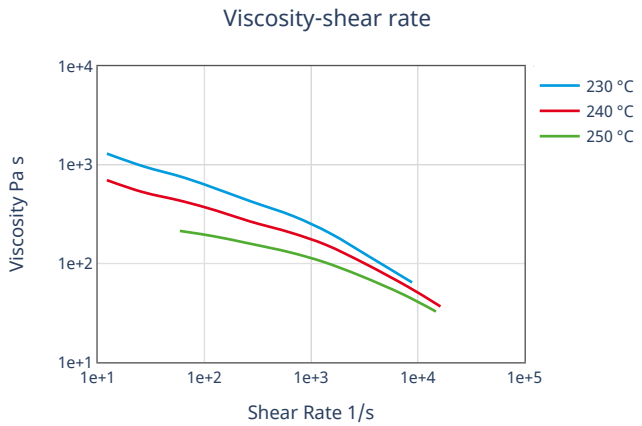
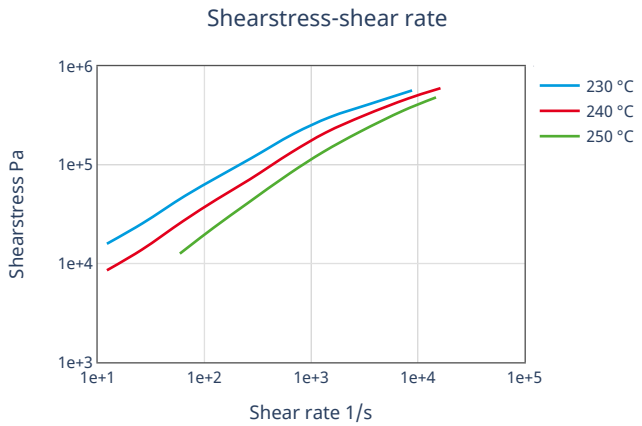
Thermal Properties	Value	Unit	Standard
Glass transition temperature, 10°C/min	-10	°C	ISO 11357-1/-2
Vicat softening temperature, B	61	°C	ISO 306
Coeff. of linear therm. expansion, normal	190	E-6/K	ISO 11359-1/-2

Electrical Properties	Value	Unit	Standard
Relative permittivity, 100Hz	4.34		IEC 62631-2-1
Relative permittivity, 1MHz	3.58		IEC 62631-2-1
Dissipation factor, 100Hz	212	E-4	IEC 62631-2-1
Dissipation factor, 1MHz	460	E-4	IEC 62631-2-1
Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
Electric strength	15	kV/mm	IEC 60243-1
Comparative tracking index	600		IEC 60112

Other Properties	Value	Unit	Standard
Humidity absorption	0.11	%	Sim. to ISO 62
Density	1240	kg/m³	ISO 1183

Diagrams





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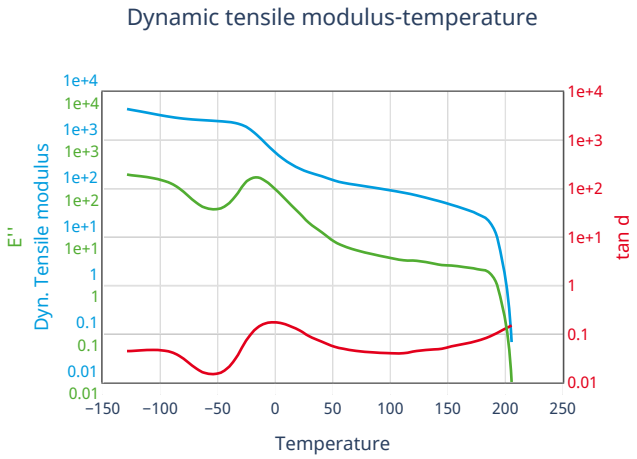

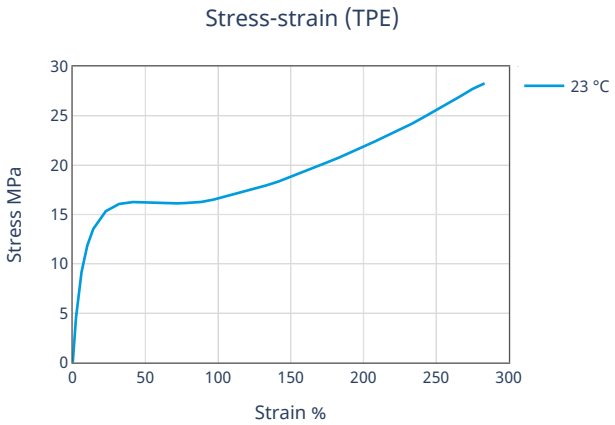

Processing Information

Injection molding

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

Other extrusion

Extrusion guideline Arnitel® C and Arnitel® U
Arnitel® Recommendations for Extrusion