

TECHNICAL DATA SHEET

Arnitel® UM551

Envalior
TPC

Processing

Injection molding, Film extrusion

Delivery Form

Pellets

Special Characteristics

Light stabilized or stable to light, U.V. stabilized or stable to weather, Heat stabilized or stable to heat

Product Text

Product Information

Due to limited hydrolysis resistance, this material should only be used in dry environments.

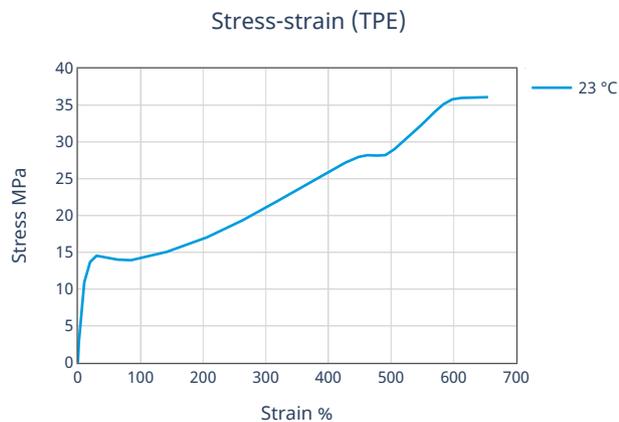
Processing/Physical Characteristics	Value	Unit	Standard
Melt volume-flow rate, MVR	13.8	cm ³ /10min	ISO 1133
Temperature	230	°C	
Load	2.16	kg	
Molding shrinkage, parallel	1.45	%	ISO 294-4, 2577
Molding shrinkage, normal	1.35	%	ISO 294-4, 2577
Mechanical Properties	Value	Unit	Standard
Yield stress	15	MPa	ISO 527
Yield strain	22	%	ISO 527
Nominal strain at break	>50	%	ISO 527
Charpy impact strength, -30°C	6	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	N	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	6	kJ/m ²	ISO 179/1eA
Shore D hardness	55		ISO 7619-1
Stress at 10% elongation	10.8	MPa	ISO 527
Stress at 100% elongation	14.1	MPa	
Stress at 300% elongation	21	MPa	ISO 527
Strain at break TPE	>300	%	ISO 527
Stress at break TPE	36	MPa	ISO 527
Tear strength, parallel	165	kN/m	ISO 34-1

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Thermal Properties	Value	Unit	Standard
Melting temperature, 10°C/min	200	°C	ISO 11357-1/-3
Temp. of deflection under load, 0.45 MPa	80	°C	ISO 75-1/-2
Vicat softening temperature, B	85	°C	ISO 306
Coeff. of linear therm. expansion, parallel	160	E-6/K	ISO 11359-1/-2
Burning behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	
Yellow card available	yes		
Burning behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	3	mm	
Yellow card available	yes		
Electrical Properties	Value	Unit	Standard
Comparative tracking index	600		IEC 60112
Other Properties	Value	Unit	Standard
Water absorption	0.6	%	Sim. to ISO 62
Humidity absorption	0.25	%	Sim. to ISO 62
Density	1260	kg/m ³	ISO 1183

Diagrams



Processing Information

Injection molding

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Injection Molding Recommendations

Steel recommendations for molds screws and barrels

Trouble shooting guideline for injection molding

Film extrusion

Arnitel® Recommendations for Extrusion

Other extrusion

Extrusion guideline Arnitel® C and Arnitel® U