Arnitel® UM551 - Shore 55 D

TPC DSM Engineering Plastics

Product Texts

ISO 18064 TPC-ES

Rheological properties	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	13.8	cm³/10min	ISO 1133
Temperature	230	°C	ISO 1133
Load	2.16	kg	ISO 1133

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	200	MPa	ISO 527-1/-2
Yield stress	15	MPa	ISO 527-1/-2
Yield strain	22	%	ISO 527-1/-2
Nominal strain at break	>50	%	ISO 527-1/-2
Charpy impact strength, -30°C	6	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
Stress at 10% elongation	13.4	MPa	ISO 527-1/-2
Stress at 100% elongation	24	MPa	ISO 527-1/-2
Stress at 300% elongation	28	MPa	ISO 527-1/-2
Strain at break TPE	>300	%	ISO 527-1/-2
Tear strength	165	kN/m	ISO 34-1
Shore D hardness, 15s	55	-	ISO 868

Thermal properties	Value	Unit	Test Standard
ISO Data			
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, 50°C/h 50N	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	IEC 60695-11-10
UL recognition	UL	-	-
Burning behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	0.8	mm	IEC 60695-11-10
UL recognition	UL	-	-

Electrical properties	Value	Unit	Test Standard
ISO Data			
Comparative tracking index	600	-	IEC 60112

Other properties	Value	Unit	Test Standard
ISO Data			
Water absorption	0.6	%	Sim. to ISO 62
Humidity absorption	0.25	%	Sim. to ISO 62
Density	1260	kg/m³	ISO 1183

Characteristics

Arnitel® UM551 - Shore 55 D

TPC

DSM Engineering Plastics

Processing

Injection Molding, Film Extrusion

Special Characteristics

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

Delivery form

Pellets

Other text information

Injection Molding

Injection Molding Recommendations