


Arnitel® UM552 - Shore 55 D

TPC

DSM Engineering Plastics

Product Texts

ISO 18064 TPC-ES

[Arnitel website](#)
Mechanical properties
ISO Data

	Value	Unit	Test Standard
Tensile Modulus	250	MPa	ISO 527-1/-2
Yield stress	15	MPa	ISO 527-1/-2
Yield strain	23	%	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
Tear strength	165	kN/m	ISO 34-1
Shore D hardness, 15s	55	-	ISO 868

Thermal properties
ISO Data

	Value	Unit	Test Standard
Melting temperature (10°C/min)	195	°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
ISO Data

	Value	Unit	Test Standard
Comparative tracking index	600	-	IEC 60112

Other properties
ISO Data

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

Characteristics
Processing

Injection Molding, Film Extrusion, Sheet Extrusion, Other Extrusion, Coating

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](#)