

Arnitel® UM551-V - Shore 55 D

TPC FR

DSM Engineering Plastics

Product Texts

Flame Retardant (halogen- phosphorous-free)

ISO 18064 TPC-ES FR

[Arnitel website](#)

Rheological properties	Value	Unit	Test Standard		
ISO Data					
Melt volume-flow rate, MVR	15	cm ³ /10min	ISO 1133		
Temperature	230	°C	ISO 1133		
Load	2.16	kg	ISO 1133		
Mechanical properties					
ISO Data					
Tensile Modulus	250	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 notched impact strength (+23°C)	N	kJ/m ²	ISO 179/1eA		
Stress at 10% elongation	13	MPa	ISO 527-1/-2		
Stress at 100% elongation	17.5	MPa	ISO 527-1/-2		
Stress at break TPE	27	MPa	ISO 527-1/-2		
Shore D hardness, 15s	55	-	ISO 868		
Thermal properties					
ISO Data					
Melting temperature (10°C/min)	200	°C	ISO 11357-1/-3		
Temp. of deflection under load (0.45 MPa)	85	°C	ISO 75-1/-2		
Vicat softening temperature, 50°C/h 50N	90	°C	ISO 306		
Electrical properties					
ISO Data					
Relative permittivity, 100Hz	5.2	-	IEC 60250		
Dissipation factor, 100Hz	0.02	E-4	IEC 60250		
Volume resistivity	>1E13	Ohm*m	IEC 60093		
Electric strength	20	kV/mm	IEC 60243-1		
Comparative tracking index	600	-	IEC 60112		
Other properties					
ISO Data					
Water absorption	0.6	%	Sim. to ISO 62		
Humidity absorption	0.25	%	Sim. to ISO 62		
Density	1280	kg/m ³	ISO 1183		
Characteristics					
Processing		Special Characteristics			
Injection Molding, Other Extrusion		Flame retardant, 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](#)