

DSM Engineering Plastics - Property Data

Arnitel® EM550

TPE-unfilled

55 Shore D, Extrusion Grade

Properties	Typical Data	Unit	Test Method
RHEOLOGICAL PROPERTIES			
Melt volume-flow rate	8	cm ³ /10min	ISO 1133
Temperature	230	°C	ISO 1133
Load	2.16	kg	ISO 1133
MECHANICAL PROPERTIES			
Shore D Hardness (3s)	53	-	ISO 868
Tensile modulus	200	MPa	ISO 527-1/-2
Stress at 10% strain	11.8	MPa	ISO 527-1/-2
Stress at 100% strain	12	MPa	ISO 527-1/-2
Charpy notched impact strength (+23°C)	N	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	25	kJ/m ²	ISO 179/1eA
THERMAL PROPERTIES			
Melting temperature (10°C/min)	207	°C	ISO 11357-1/-3
Vicat softening temperature (50°C/h 50N)	90	°C	ISO 306
Vicat softening temperature (50°C/h 10N)	190	°C	ISO 306
Coeff. of linear therm. expansion (parallel)	1.5	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	1.5	E-4/°C	ISO 11359-1/-2
Burning Behav. at 1.6 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.6	mm	IEC 60695-11-10
ELECTRICAL PROPERTIES			
Relative permittivity (100Hz)	20	-	IEC 60250
Relative permittivity (1 MHz)	4.3	-	IEC 60250
Dissipation factor (1 MHz)	120	E-4	IEC 60250
Volume resistivity	2E10	Ohm*m	IEC 60093
Surface resistivity	8E10	Ohm	IEC 60093
Electric strength	20	kV/mm	IEC 60243-1
Comparative tracking index	600	-	IEC 60112
OTHER PROPERTIES			
Density	1210	kg/m ³	ISO 1183
Water absorption	0.65	%	Sim. to ISO 62
Humidity absorption	0.2	%	Sim. to ISO 62

