Arnitel®

Arnitel® UM551-V

TPC-ES FR

Flame Retardant (halogen- phosphorous-free)

Print Date: 2018-05-25

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

Properties	Typical Data	Unit	Test Method
Rheological properties	Value		
Melt volume-flow rate	15	cm^3/10min	ISO 1133
Temperature	230	°C	ISO 1133
Load	2.16	kg	ISO 1133
Melt flow index MFI	14.4	g/10min	ISO 1133
MFI test load	2.16	kg	ISO 1133
MFI test temperature	230	°C	ISO 1133
Molding shrinkage [parallel]	1.35	%	Sim. to ISO 294-4
Molding shrinkage [normal]	1.35	%	Sim. to ISO 294-4
Mechanical properties	Value		
Shore D Hardness (3s)	55	-	ISO 868
Shore D Hardness (15s)	55	-	ISO 868
Tensile modulus	250	MPa	ISO 527-1/-2
Stress at break	27	MPa	ISO 527-1/-2
Nominal strain at break	375	%	ISO 527-1/-2
Stress at 10% strain	13	MPa	ISO 527-1/-2
Stress at 100% strain	17.5	MPa	ISO 527-1/-2
Charpy notched impact strength (+23°C)	N	kJ/m^2	ISO 179/1eA
Izod notched impact strength (+23°C)	N	kJ/m^2	ISO 180/1A
Thermal properties	Value		
Melting temperature (10°C/min)	200	°C	ISO 11357-1/-3

Property Data

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Properties	Typical Data	Unit	Test Method
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
Burning Behav. at 1.5 mm nom. thickn.	V-2	class	IEC 60695-11-10
Thickness tested	1.5	mm	IEC 60695-11-10
UL recognition	Yes	-	-

Electrical properties	Value		
Relative permittivity (100Hz)	5.2	-	IEC 60250
Dissipation factor (100 Hz)	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	V	IEC 60112

Other properties	Value		
Density	1280	kg/m³	ISO 1183
Water absorption	0.6	%	Sim. to ISO 62
Humidity absorption	0.25	%	Sim. to ISO 62