

Arnitel® CM620-S

TPC-ES FR

64 Shore D, Extrusion, Flame Retardant

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
Mechanical properties			
	Value		
Shore D Hardness (3s)	64	-	ISO 868
Shore D Hardness (15s)	61	-	ISO 868
Shore A Hardness (3s)	98	-	ISO 868
Shore A Hardness (15s)	98	-	ISO 868
Tensile modulus	330	MPa	ISO 527-1/-2
Stress at break	35	MPa	ISO 527-1/-2
Nominal strain at break	440	%	ISO 527-1/-2
Stress at 5% strain	15	MPa	ISO 527-1/-2
Stress at 10% strain	20	MPa	ISO 527-1/-2
Stress at 50% strain	23	MPa	ISO 527-1/-2
Stress at 100% strain	20	MPa	ISO 527-1/-2
Charpy notched impact strength (+23°C)	30	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	5	kJ/m ²	ISO 179/1eA
Izod notched impact strength (+23°C)	24	kJ/m ²	ISO 180/1A
Izod notched impact strength (-30°C)	4.4	kJ/m ²	ISO 180/1A
Compression Set under constant strain at 70 °C	40	%	ISO 815

Mechanical properties (die cutting)

Value



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Properties	Typical Data	Unit	Test Method
Stress at break (normal)	34	MPa	ISO 527-1/-2
Stress at 5% strain (normal)	14	MPa	ISO 527-1/-2
Stress at 10% strain (normal)	19	MPa	ISO 527-1/-2
Stress at 50% strain (normal)	20	MPa	ISO 527-1/-2
Stress at 100% strain (normal)	18	MPa	ISO 527-1/-2
Tear strength (normal)	171	kN/m	ISO 34-1; Method B
Tear strength (parallel)	187	kN/m	ISO 34-1; Method B
Strain at break (normal)	530	%	ISO 527-1/-2

Thermal properties

Value

Melting temperature (10°C/min)	205	°C	ISO 11357-1/-3
Vicat softening temperature (50°C/h 50N)	95	°C	ISO 306
Burning Behav. at 0.75 mm nom. thickn.	V-2	class	IEC 60695-11-10

Electrical properties

Value

Relative permittivity (100Hz)	4.3	-	IEC 62631-2-1
Dissipation factor (1 MHz)	495	E-4	IEC 62631-2-1
Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
Surface resistivity	>1E15	Ohm	IEC 62631-3-2
Electric strength	14.4	kV/mm	IEC 60243-1

Other properties

Value

Density	1330	kg/m ³	ISO 1183
Humidity absorption	0.1	%	Sim. to ISO 62

