

Arnitel[®] CM600–V

TPC–ES FR

Extrusion, Flame Retardant (halogen free)

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES		VALUE	
Melt volume–flow rate	13	cm ³ /10min	ISO 1133
Temperature	230	°C	ISO 1133
Load	2.16	kg	ISO 1133
MECHANICAL PROPERTIES		VALUE	
Shore D Hardness (3s)	62	–	ISO 868
Shore D Hardness (15s)	62	–	ISO 868
Tensile modulus	500	MPa	ISO 527–1/–2
Stress at break	18	MPa	ISO 527–1/–2
Nominal strain at break	200	%	ISO 527–1/–2
Stress at 5% strain	17	MPa	ISO 527–1/–2
Stress at 10% strain	20	MPa	ISO 527–1/–2
Stress at 50% strain	18	MPa	ISO 527–1/–2
Stress at 100% strain	17	MPa	ISO 527–1/–2
Charpy notched impact strength (+23°C)	11	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (–30°C)	3	kJ/m ²	ISO 179/1eA
Izod notched impact strength (+23°C)	11	kJ/m ²	ISO 180/1A
Izod notched impact strength (–20°C)	3.2	kJ/m ²	ISO 180/1A
Compression Set under constant strain at 23 °C	23	%	ISO 815
Compression Set under constant strain at 70 °C	50	%	ISO 815

MECHANICAL PROPERTIES (DIE CUTTING) VALUE

Property Data

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PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
Stress at break (normal)	17	MPa	ISO 527–1/–2
Stress at 5% strain (normal)	16	MPa	ISO 527–1/–2
Stress at 10% strain (normal)	19	MPa	ISO 527–1/–2
Stress at 50% strain (normal)	17	MPa	ISO 527–1/–2
Stress at 100% strain (normal)	16	MPa	ISO 527–1/–2
Tear strength (normal)	131	kN/m	ISO 34–1; Method B
Tear strength (parallel)	134	kN/m	ISO 34–1; Method B
Strain at break (normal)	310	%	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)	85	°C	ISO 306
Coeff. of linear therm. expansion (parallel)	1.25	E–4/°C	ISO 11359–1/–2
Coeff. of linear therm. expansion (normal)	1.23	E–4/°C	ISO 11359–1/–2

ELECTRICAL PROPERTIES	VALUE		
Relative permittivity (100Hz)	4.2	–	IEC 62631–2–1
Relative permittivity (1 MHz)	3.7	–	IEC 62631–2–1
Dissipation factor (100 Hz)	157	E–4	IEC 62631–2–1
Dissipation factor (1 MHz)	385	E–4	IEC 62631–2–1
Volume resistivity	>1E13	Ohm*m	IEC 62631–3–1
Electric strength	26.3	kV/mm	IEC 60243–1
Comparative tracking index	600	V	IEC 60112

OTHER PROPERTIES	VALUE		
Density	1320	kg/m ³	ISO 1183
Humidity absorption	0.1	%	Sim. to ISO 62