Property Data

Envalior
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Arnitel® EM550–H

TPC–ET

Extrusion Grade, Heat Stabilized

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES	**VALUE**		
Melt volume–flow rate	9	cm³/10min	ISO 1133
Temperature	230	°C	ISO 1133
Load	2.16	kg	ISO 1133
MECHANICAL PROPERTIES	**VALUE**		
Shore D Hardness (3s)	52	–	ISO 868
Tensile modulus	175	MPa	ISO 527–1/–2
Stress at break	25	MPa	ISO 527–1/–2
Nominal strain at break	360	%	ISO 527–1/–2
Stress at 5% strain	8	MPa	ISO 527–1/–2
Stress at 10% strain	12	MPa	ISO 527–1/–2
Stress at 50% strain	15	MPa	ISO 527–1/–2
Stress at 100% strain	16	MPa	ISO 527–1/–2
Charpy notched impact strength (+23°C)	N	kJ/m²	ISO 179/1eA
Charpy notched impact strength (–30°C)	25	kJ/m²	ISO 179/1eA
Flexural modulus	195	MPa	ISO 178
Compression Set under constant strain at 70 °C	40	%	ISO 815
MECHANICAL PROPERTIES (DIE CUTTING)	**VALUE**		
Stress at break (normal)	46	MPa	ISO 527–1/–2
Tear strength (normal)	132	kN/m	ISO 34–1; Method B

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Tear strength (parallel)	142	kN/m	ISO 34–1; Method B
Strain at break (normal)	820	%	ISO 527–1/–2

THERMAL PROPERTIES	VALUE		
Melting temperature (10°C/min)	207	°C	ISO 11357–1/–3
Vicat softening temperature (50°C/h 50N)	90	°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 1.5 mm nom. thickn.	HB	class	IEC 60695–11–10
Thickness tested	1.5	mm	IEC 60695–11–10

ELECTRICAL PROPERTIES	VALUE		
Relative permittivity (100Hz)	4.4	–	IEC 62631–2–1
Relative permittivity (1 MHz)	4	–	IEC 62631–2–1
Dissipation factor (1 MHz)	400	E–4	IEC 62631–2–1
Volume resistivity	1E11	Ohm*m	IEC 62631–3–1
Electric strength	21	kV/mm	IEC 60243–1

OTHER PROPERTIES	VALUE		
Density	1200	kg/m³	ISO 1183
Water absorption	0.65	%	Sim. to ISO 62
Humidity absorption	0.2	%	Sim. to ISO 62