Property Data (Provisional)

Envalior
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Arnitel® EM460–08

TPC–ET

Food Contact Quality, Injection Molding or Extrusion Grade

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES	**VALUE**		
Melt volume–flow rate	46	cm³/10min	ISO 1133
Temperature	230	°C	ISO 1133
Load	2.16	kg	ISO 1133
Molding shrinkage [parallel]	1.25	%	Sim. to ISO 294–4
Molding shrinkage [normal]	1.5	%	Sim. to ISO 294–4
MECHANICAL PROPERTIES	**VALUE**		
Shore D Hardness (3s)	43	–	ISO 868
Tensile modulus	85	MPa	ISO 527–1/–2
Stress at break	23	MPa	ISO 527–1/–2
Nominal strain at break	700	%	ISO 527–1/–2
Stress at 5% strain	3.9	MPa	ISO 527–1/–2
Stress at 10% strain	6.6	MPa	ISO 527–1/–2
Stress at 50% strain	9.2	MPa	ISO 527–1/–2
Stress at 100% strain	9.3	MPa	ISO 527–1/–2
Charpy notched impact strength (+23°C)	N	kJ/m²	ISO 179/1eA
Charpy notched impact strength (–30°C)	N	kJ/m²	ISO 179/1eA
Izod notched impact strength (+23°C)	N	kJ/m²	ISO 180/1A
Izod notched impact strength (–20°C)	N	kJ/m²	ISO 180/1A
Flexural modulus	95	MPa	ISO 178
Compression Set under constant strain at 70 °C	50	%	ISO 815

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PROPERTIES	*TYPICAL DATA*	*UNIT*	*TEST METHOD*
MECHANICAL PROPERTIES (DIE CUTTING)	***VALUE***		
Stress at break (normal)	20	MPa	ISO 527–1/–2
Tear strength (normal)	119	kN/m	ISO 34–1; Method B
Tear strength (parallel)	120	kN/m	ISO 34–1; Method B
Strain at break (normal)	850	%	ISO 527–1/–2
THERMAL PROPERTIES	***VALUE***		
Melting temperature (10°C/min)	189	°C	ISO 11357–1/–3
Coeff. of linear therm. expansion (parallel)	1.6	E–4/°C	ISO 11359–1/–2
Coeff. of linear therm. expansion (normal)	1.6	E–4/°C	ISO 11359–1/–2
ELECTRICAL PROPERTIES	***VALUE***		
Relative permittivity (1 MHz)	4.4	–	IEC 62631–2–1
Dissipation factor (1 MHz)	350	E–4	IEC 62631–2–1
Volume resistivity	1E11	Ohm*m	IEC 62631–3–1
OTHER PROPERTIES	***VALUE***		
Density	1150	kg/m³	ISO 1183
Water absorption	0.7	%	Sim. to ISO 62
Humidity absorption	0.3	%	Sim. to ISO 62