Property Data

Envalior
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Novamid® ST220 NAT

PA6–I

Impact Modified, Injection Molding, Medium Viscosity

Print Date: 2024–03–27

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES	DRY / COND		
Molding shrinkage [parallel]	1.5 / *	%	Sim. to ISO 294–4
Molding shrinkage [normal]	2 / *	%	Sim. to ISO 294–4
MECHANICAL PROPERTIES	DRY / COND		
Tensile modulus	2100 / 630	MPa	ISO 527–1/–2
Yield stress	50 / 30	MPa	ISO 527–1/–2
Yield strain	4.4 / 21.6	%	ISO 527–1/–2
Nominal strain at break	35 / >50	%	ISO 527–1/–2
Flexural modulus	2000 / 650	MPa	ISO 178
Flexural strength	76 / 30	MPa	ISO 178
Charpy impact strength (+23°C)	N / N	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	85 / N	kJ/m²	ISO 179/1eA
THERMAL PROPERTIES	DRY / COND		
Melting temperature (10°C/min)	220 / *	°C	ISO 11357–1/–3
Temp. of deflection under load (1.80 MPa)	53 / *	°C	ISO 75–1/–2
Temp. of deflection under load (0.45 MPa)	87 / *	°C	ISO 75–1/–2
Coeff. of linear therm. expansion (parallel)	0.9 / *	E–4/°C	ISO 11359–1/–2
Coeff. of linear therm. expansion (normal)	1 / *	E–4/°C	ISO 11359–1/–2
ELECTRICAL PROPERTIES	DRY / COND		
Relative permittivity (100Hz)	4 / –	–	IEC 62631–2–1
Relative permittivity (1 MHz)	3 / –	–	IEC 62631–2–1

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PROPERTIES	*TYPICAL DATA*	*UNIT*	*TEST METHOD*
Dissipation factor (100 Hz)	100 / –	E–4	IEC 62631–2–1
Dissipation factor (1 MHz)	180 / –	E–4	IEC 62631–2–1
Volume resistivity	9E12 / –	Ohm*m	IEC 62631–3–1
Surface resistivity	– / 3E13	Ohm	IEC 62631–3–2
Electric strength	29 / –	kV/mm	IEC 60243–1
Comparative tracking index	600 / –	V	IEC 60112

OTHER PROPERTIES	*DRY / COND*		
Humidity absorption	2.2 / *	%	Sim. to ISO 62
Density	1070 / –	kg/m³	ISO 1183