

Product Texts

PA12-P, MHLR, 12-004

Rilsamid® AMNO P40 TLD resin is a natural polyamide. This grade is plasticized and designed for injection molding.

Processing/Physical Characteristics

	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melt volume-flow rate, MVR	51 / *	cm ³ /10min	ISO 1133
Temperature	235 / *	°C	-
Load	2.16 / *	kg	-

[C]: CAMPUS

Mechanical properties

	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	440 / 420	MPa	ISO 527
^[C] Yield stress	26 / 24	MPa	ISO 527
^[C] Yield strain	26 / 26	%	ISO 527
^[C] Nominal strain at break	>50 / >50	%	ISO 527
^[C] Charpy notched impact strength, +23°C	- / 25	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	- / 4	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties

	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	171 / *	°C	ISO 11357-1/-3
^[C] Temp. of deflection under load, 1.80 MPa	46 / *	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	125 / *	°C	ISO 75-1/-2
^[C] Vicat softening temperature, B	132 / *	°C	ISO 306
^[C] Coeff. of linear therm. expansion, parallel	140 / *	E-6/K	ISO 11359-1/-2

[C]: CAMPUS

Electrical properties

	dry / cond	Unit	Test Standard
ISO Data			
^[C] Relative permittivity, 100Hz	12 / -	-	IEC 62631-2-1
^[C] Relative permittivity, 1MHz	4 / -	-	IEC 62631-2-1
^[C] Dissipation factor, 100Hz	2550 / -	E-4	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	1290 / -	E-4	IEC 62631-2-1
^[C] Volume resistivity	- / 1E9	Ohm*m	IEC 62631-3-1
^[C] Surface resistivity	* / 5E11	Ohm	IEC 62631-3-2
^[C] Electric strength	- / 24	kV/mm	IEC 60243-1
^[C] Comparative tracking index	* / 600	-	IEC 60112

[C]: CAMPUS

Other properties

	dry / cond	Unit	Test Standard
^[C] Water absorption	1.2 / *	%	Sim. to ISO 62
^[C] Density	1040 / 1040	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics**Processing**

Injection Molding

Delivery form

Pellets

Additives

Release agent, Plasticizer

Special Characteristics

Light stabilized or stable to light, U.V. stabilized or stable to weather, Heat stabilized or stable to heat

Regional Availability

North America, Europe, Asia Pacific, South and Central America, Near East/Africa

Other text information**Injection molding****Processing conditions, Injection:**

- Typical melt temperature (Min / Recommended / Max) : 230°C / 250°C / 270°C.
- Mold temperature : 20 - 40°C
- Drying time and temperature (only necessary for bags opened for more than two hours) : 4-6 hours at 80 - 90°C.