

**Product Texts**

PA12, MHLR, 12-010

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

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Melt volume-flow rate, MVR	57 / *	cm <sup>3</sup> /10min	ISO 1133
Temperature	235 / *	°C	-
Load	2.16 / *	kg	-

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	1450 / 1170	MPa	ISO 527
<sup>[C]</sup> Yield stress	42 / 38	MPa	ISO 527
<sup>[C]</sup> Yield strain	7 / 7	%	ISO 527
<sup>[C]</sup> Nominal strain at break	>50 / >50	%	ISO 527
<sup>[C]</sup> Charpy notched impact strength, +23°C	- / 9	kJ/m <sup>2</sup>	ISO 179/1eA
<sup>[C]</sup> Charpy notched impact strength, -30°C	- / 5	kJ/m <sup>2</sup>	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Melting temperature, 10°C/min	178 / *	°C	ISO 11357-1/-3
<sup>[C]</sup> Temp. of deflection under load, 1.80 MPa	55 / *	°C	ISO 75-1/-2
<sup>[C]</sup> Temp. of deflection under load, 0.45 MPa	135 / *	°C	ISO 75-1/-2
<sup>[C]</sup> Vicat softening temperature, B	142 / *	°C	ISO 306
<sup>[C]</sup> Coeff. of linear therm. expansion, parallel	130 / *	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, normal	120 / *	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Burning Behav. at 1.5 mm nom. thickn.	HB / *	class	IEC 60695-11-10
<sup>[C]</sup> Burning Behav. at thickness h	V-2 / *	class	IEC 60695-11-10
Thickness tested	3.2 / *	mm	-
Yellow Card available	yes / *	-	-
<sup>[C]</sup> Oxygen index	22 / *	%	ISO 4589-1/-2

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Relative permittivity, 100Hz	4 / -	-	IEC 62631-2-1
<sup>[C]</sup> Relative permittivity, 1MHz	3 / -	-	IEC 62631-2-1
<sup>[C]</sup> Dissipation factor, 100Hz	779 / -	E-4	IEC 62631-2-1
<sup>[C]</sup> Dissipation factor, 1MHz	290 / -	E-4	IEC 62631-2-1
<sup>[C]</sup> Volume resistivity	- / 1E12	Ohm*m	IEC 62631-3-1
<sup>[C]</sup> Surface resistivity	* / 1E14	Ohm	IEC 62631-3-2
<sup>[C]</sup> Electric strength	- / 30	kV/mm	IEC 60243-1
<sup>[C]</sup> Comparative tracking index	* / 600	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
<sup>[C]</sup> Water absorption	1.8 / *	%	Sim. to ISO 62
<sup>[C]</sup> Humidity absorption	0.7 / *	%	Sim. to ISO 62
<sup>[C]</sup> Density	1020 / 1020	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

**Characteristics**

**Processing**

Injection Molding

**Delivery form**

Pellets

**Additives**

Release agent

**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 / 270°C / 290°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.