

**Product Texts**

ISO 16396 - PA12-P, EGHL, C22-004

Rilsamid® AESNO P40 TL resin is a natural polyamide.

This grade is plasticized and designed for tube extrusion.

Rilsamid® AESNO P40 TL resin falls into the PA12-PHL category according to DIN 73378.

**Main applications:**

Air brake.

Tubing for use in motor vehicles

**Packaging:**

This grade is delivered dried in sealed packaging (25 kg bags) ready to be processed.

**Shelf life:**

Two years from the date of delivery. for any use above this limit, please refer to our technical services.

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Melt volume-flow rate, MVR	16 / *	cm <sup>3</sup> /10min	ISO 1133
Temperature	235 / *	°C	-
Load	5 / *	kg	-

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	430 / 380	MPa	ISO 527
<sup>[C]</sup> Yield stress	26 / 23	MPa	ISO 527
<sup>[C]</sup> Yield strain	24 / 26	%	ISO 527
<sup>[C]</sup> Nominal strain at break	>50 / >50	%	ISO 527
<sup>[C]</sup> Charpy notched impact strength, -30°C	- / 5	kJ/m <sup>2</sup>	ISO 179/1eA
<sup>[C]</sup> Puncture - maximum force, -30°C	- / 5600	N	ISO 6603-2
<sup>[C]</sup> Puncture energy, -30°C	- / 60	J	ISO 6603-2

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Melting temperature, 10°C/min	174 / *	°C	ISO 11357-1/-3
<sup>[C]</sup> Temp. of deflection under load, 1.80 MPa	46 / *	°C	ISO 75-1/-2
<sup>[C]</sup> Temp. of deflection under load, 0.45 MPa	90 / *	°C	ISO 75-1/-2
<sup>[C]</sup> Vicat softening temperature, B	130 / *	°C	ISO 306
<sup>[C]</sup> Coeff. of linear therm. expansion, parallel	140 / *	E-6/K	ISO 11359-1/-2

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Volume resistivity	- / 1E9	Ohm*m	IEC 62631-3-1
<sup>[C]</sup> Surface resistivity	* / 5E11	Ohm	IEC 62631-3-2
<sup>[C]</sup> Electric strength	- / 24	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	1.2 / *	%	Sim. to ISO 62
<sup>[C]</sup> Density	1030 / 1030	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

## Characteristics

### Processing

Injection Molding, Profile Extrusion, Other Extrusion

### Delivery form

Pellets

### Additives

Lubricants, 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

### Profile extrusion

#### Processing conditions, Extrusion :

- Typical melt temperature (Min / Recommended / Max) : 210°C / 230°C / 260°C.
- Drying time and temperature (only necessary for bags opened for more than two hours) : 4-8 hours at 80°C.