

Rilsamid® AESNO MED

PA12

ARKEMA

ISO 16396 - PA12, EG, C22-010

Rilsamid® AESNO MED is a rigid polyamide 12 with high viscosity designed for tube extrusion. This grade, dedicated to extrusion, offers the highest quality and it is specifically designed to meet the stringent requirements of the medical applications such as minimally invasive devices.

Upon request letters regarding USP Class VI compliance can be provided.

Main Application:

- Medical Tubing.
- Catheters.

Packaging:

This grade is delivered dried in sealed packaging (20 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.

Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	8 / *	cm ³ /10min	ISO 1133
Temperature	235 / *	°C	-
Load	5 / *	kg	-

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	1500 / 1440	MPa	ISO 527
Yield stress	50 / 43	MPa	ISO 527
Yield strain	5 / 5	%	ISO 527
Nominal strain at break	>50 / >50	%	ISO 527
Notched Impact Strength (Charpy), +23°C	- / 11	kJ/m ²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	- / 6	kJ/m ²	ISO 179/1eA
Puncture - maximum force, -30°C	- / 4800	N	ISO 6603-2
Puncture energy, -30°C	- / 60	J	ISO 6603-2

Thermal Properties	dry / cond	Unit	Test Standard
ISO Data			
Melting Temperature (10°C/min)	180 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	55 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	135 / *	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	142 / *	°C	ISO 306
Coeff. of Linear Therm. Expansion, parallel	100 / *	E-6/K	ISO 11359-1/-2

Electrical Properties	dry / cond	Unit	Test Standard
ISO Data			
Volume Resistivity	- / 1E12	Ohm*m	IEC 62631-3-1
Surface Resistivity	* / 1E14	Ohm	IEC 62631-3-2
Electric Strength	- / 30	kV/mm	IEC 60243-1
Comparative tracking index	- / 600	-	IEC 60112

Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Water Absorption	1.6 / *	%	Sim. to ISO 62
Density	1010 / -	kg/m ³	ISO 1183

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Characteristics

Processing

Film Extrusion, Profile Extrusion, Sheet Extrusion, Other Extrusion

Certifications

Medical, US Pharmacopeia Class VI Approved

Delivery form

Pellets

Profile extrusion

Processing conditions, Extrusion:

- Typical melt temperature (Min / Recommended / Max) : 190°C / 210°C / 230°C.
- Drying time and temperature (only necessary for bags opened for more than two hours) : 4-6 hours at 65 - 80°C.