

PA11, MHL, 12-010

Rilsan® BMNO MED resin is a polyamide 11 produced from a renewable source. This natural grade dedicated to injection offers the highest quality and it is specially 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.

PROPERTIES	DRY / COND	UNIT	TEST STANDARD
RHEOLOGICAL PROPERTIES			
Melt Volume-Flow Rate	30 / *	cm ³ /10 min	ISO 1133
Temperature	235 / *	°C	-
	455 / *	°F	
Load	2.16 / *	kg	-
	4.76 / *	lb	
Molding Shrinkage, parallel	1.1 / *	%	ISO 294-4, 2577
Molding Shrinkage, normal	0.9 / *	%	ISO 294-4, 2577
MECHANICAL PROPERTIES			
Tensile Modulus	- / 1280	MPa	ISO 527-1/-2
	- / 186000	psi	
Yield Stress	- / 41	MPa	ISO 527-1/-2
	- / 5950	psi	
Yield Strain	-/5	%	ISO 527-1/-2
Nominal Strain at Break	-/>50	%	ISO 527-1/-2
Shore D Hardness, after 15 s	68 / *	-	ISO 868
Charpy Impact Strength, +23°C	- / No Break	kJ/m²	ISO 179/1eU
Charpy Impact Strength, -30°C	- / No Break	kJ/m²	ISO 179/1eU
Charpy Notched Impact Strength, +23°C	- / 8.3	kJ/m²	ISO 179/1eA
	- / 3.95	ftlb/in²	
Charpy Notched Impact Strength, -30°C	- / 10.5	kJ/m²	ISO 179/1eA
	- / 4.99	ftlb/in²	
THERMAL PROPERTIES			
Melting Temperature, 10°C/min	189 / *	°C	ISO 11357-1/-3
Temp. of Deflection Under Load, 1.80 MPa	50 / *	°C	ISO 75-1/-2
	122 / *	°F	
Temp. of Deflection Under Load, 0.45 MPa	145 / *	°C	ISO 75-1/-2
	293 / *	°F	





OTHER PROPERTIES			
%Bio-Based	98	-	ASTM D6866
Density	1030 / 1030	kg/m³	ISO 1183
	1.03 / 1.03	g/cm³	

MAIN APPLICATIONS:

 Medical molded components such as • Minimally invasive devices needle fittings for syringes

PACKAGING:

This grade is delivered dried in sealed packaging (44 lb bags) ready to be processed.

SHELF LIFE:

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

Processing conditions:

- Typical melt temperature (Min / Recommended / Max) : 240°C / 270°C / 290°C.
- Mold temperature: 25 60°C

- Drying time and temperature (only necessary for bags opened for more than two hours): 4-6 hours at 80-90°C.

PROCESSING	Headquarters:	
Injection Molding	Arkema France 420 rue d'Estienne d'Orves 92705 Colombes Cedex France T +33 (0)1 49 00 80 80	
DELIVERY FORM		
Pellets	hpp.arkema.com	
SPECIAL CHARACTERISTICS	Arkema Inc. – High Performance Polymers	
Bio-Based	900 First Avenue	
REGIONAL AVAILABILITY	King of Prussia, PA 19406 Tel.: +1 610 205 7000 hpp.arkema.com	
North America, Europe, Asia Pacific, South and Central America, Near East/Africa		

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