

# RILSAN® BMNO

PA11, MHL, 12-010

**Rilsan® BMNO resin** is a polyamide 11 produced from a renewable source. This natural grade contains no additive and is specially designed for food contact application.

According to ASTM D6866, the biobased carbon content is measured at 98%.

PROPERTIES	DRY / COND	UNIT	TEST STANDARD
<b>RHEOLOGICAL PROPERTIES</b>			
Melt Volume-Flow Rate	30 / *	cm <sup>3</sup> /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
<b>MECHANICAL PROPERTIES</b>			
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/m <sup>2</sup>	ISO 179/1eU
Charpy Impact Strength, -30°C	- / No Break	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy Notched Impact Strength, +23°C	- / 8.3	kJ/m <sup>2</sup>	ISO 179/1eA
	- / 3.95	ftlb/in <sup>2</sup>	
Charpy Notched Impact Strength, -30°C	- / 10.5	kJ/m <sup>2</sup>	ISO 179/1eA
	- / 4.99	ftlb/in <sup>2</sup>	
<b>THERMAL PROPERTIES</b>			
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	
Burning Behav. at 1.5 mm Nominal Thickness	HB / *	class	IEC 60695-11-10

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Source: automatically generated TDS from Material Database on 12-08-2024

Yellow Card available	yes / *	-	-
<b>OTHER PROPERTIES</b>			
%Bio-Based	98	-	ASTM D6866
Water Absorption, 23°C, immersion, equilibrium	1.9 / *	%	ISO 62
Density	1030 / 1030	kg/m³	ISO 1183
	1.03 / 1.03	g/cm³	

## MAIN APPLICATIONS:

- Injected parts for food application

## PACKAGING:

This grade is delivered dried in sealed packaging (25 kg 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) : 210°C / 230°C / 280°C.
- Mold temperature : 20 - 60°C
- Drying time and temperature (only necessary for bags opened for more than two hours) : 4-6 hours at 80-90°C.

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

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