

## TECHNICAL DATA SHEET RILSAN® BMNO

### POLYAMIDE 11 PELLET

RILSAN® BMNO is a polyamide 11 resin. It is produced from a renewable & sustainable source (castor oil). This natural grade contains no additive and is specially designed for food contact application

Designation : ISO 16396 - PA11, M, C12-010

#### DESIGNATION

PA11

#### DELIVERY FORM

- Pellets

#### TRANSFORMATION PROCESSES

- Injection Molding

### RHEOLOGICAL PROPERTIES

속성	값	테스트 표준
Shrinkage, Normal (t+24h)	0.9 %	ISO 294-4
Shrinkage, Parallel (t+24h)	1.1 %	ISO 294-4
Melt volume flow rate (MVR), 235°C / 2.16 kg (455°F / 4.4 lb)	30 cm³/10min	ISO 1133

### MECHANICAL PROPERTIES

속성	DRY / COND VALUE*	테스트 표준
Hardness, Shore D, 15 s	- / 68	ISO 868
Charpy unnotched impact strength, 23°C (73°F)	- / No Break	ISO 179 1eU
Charpy unnotched impact strength, -30°C (-22°F)	- / No Break	ISO 179 1eU
Nominal strain at break, 23°C (73°F), 50 mm/min	- / > 50 %	ISO 527-1/-2
Yield strain, 23°C (73°F), 50 mm/min	- / 5 %	ISO 527-1/-2
Yield stress, 23°C (73°F), 50 mm/min	- / 41 MPa	ISO 527-1/-2
Tensile modulus, 23°C (73°F), 1 mm/min	- / 1280 MPa	ISO 527-1/-2
Charpy notched impact strength, 23°C (73°F)	- / 8.3 kJ/m²	ISO 179 1eA
Charpy notched impact strength, -30°C (-22°F)	- / 10.5 kJ/m²	ISO 179 1eA
Flexural modulus, 23°C (73°F)	- / 1140 MPa	ISO 178

\*DRY: Dry As Molded (DAM) if pellet / Dry if powder.  
COND: Conditionned.

# RILSAN® BMNO

속성	값	테스트 표준
Yellow card available	yes	
Heat deflection temperature, 0.45 MPa	145 °C	ISO 75-1/-2
Heat deflection temperature, 1.8 MPa	50 °C	ISO 75-1/-2
Melting temperature, 10°C/min	189 °C	ISO 11357-1/-3

## OTHER PROPERTIES

속성	값	테스트 표준
Bio-based carbon content, Measured	98 %	ASTM D6866
Water absorption, 23°C (73°F), immersion, equilibrium	1.9 %	ISO 62
Specific gravity, 23°C (73°F)	1.03 g/cm <sup>3</sup>	ISO 1183-1

## PACKAGING

This grade is delivered dried in sealed packaging ready to be processed. Available packaging:

- 26 kg / 55 lb bags

## SHELF LIFE

Two years from the date of delivery, when stored properly (sealed bags, appropriate moisture, UV protection and temperature). For any use above this limit, please refer to our technical services.

## PROCESSING CONDITIONS:

- Typical melt temperature (Min / Recommended / Max) - Injection Molding: 210°C / 230°C / 260°C (410°F / 445°F / 500°F)
- Typical mold temperature - Injection molding: 20-60°C (70-140°F)
- Drying time and temperature: 80-90°C (175-195°F) / 4-6 hours

## SPECIAL CHARACTERISTICS

- Bio-based
- Low oligomers

**Headquarter: Arkema France**  
420, rue d'Estienne d'Orves  
92705 Colombes Cedex – France  
T +33 (0)1 49 00 80 80

Disclaimer - Please consult Arkema's disclaimer regarding the use of Arkema's products on <https://www.arkema.com/global/en/products/product-safety/disclaimer/> which is incorporated herein by reference and made a part hereof.

Arkema France, a French société anonyme registered at the Trade and Companies Register of Nanterre under the number 319 632 790

[arkema.com](https://www.arkema.com)

**ARKEMA**