

## TECHNICAL DATA SHEET

# RILSAN® BESN BLACK P212 CTL

## POLYAMIDE 11 PELLET

RILSAN® BESN BLACK P212 CTL is a polyamide 11 compound. It produced from a renewable & sustainable source (castor oil). This plasticized and impact-modified electrostatic discharge (ESD) grade is specially designed for conductive multi-layer fuel line applications.

**Designation :** ISO 16396 - PA11-IP, CDx, EG1HL, C22-007

### DESIGNATION

PA11-IP

### MAIN APPLICATIONS

- Auto - Water Cooling Circuit
- Auto - Gasoline Lines

### DELIVERY FORM

- Pellets

### TRANSFORMATION PROCESSES

- Extrusion - General
- Tube Extrusion

### ADDITIVES

- Heat Stabilized
- Light Stabilized
- Plasticizer

## MECHANICAL PROPERTIES

PROPERTIES	DRY / COND VALUE*	TEST STANDARD
Tensile modulus, 23°C (73°F), 1 mm/min	705 / 705 MPa	ISO 527-1/-2
Yield stress, 23°C (73°F), 50 mm/min	31 / 31 MPa	ISO 527-1/-2
Yield strain, 23°C (73°F), 50 mm/min	- / 45 %	ISO 527-1/-2
Nominal strain at break, 23°C (73°F), 50 mm/min	> 50 / > 50 %	ISO 527-1/-2
Flexural modulus, 23°C (73°F)	- / 645 MPa	ISO 178
Charpy unnotched impact strength, 23°C (73°F)	No break / No Break	ISO 179 1eU
Charpy unnotched impact strength, -30°C (-22°F)	No break / No Break	ISO 179 1eU
Charpy notched impact strength, 23°C (73°F)	No Break / No Break	ISO 179 1eA
Charpy notched impact strength, -30°C (-22°F)	- / 9 kJ/m <sup>2</sup>	ISO 179 1eA
Hardness, Shore D, 15 s	- / 66	ISO 868

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

## THERMAL PROPERTIES

PROPERTIES	VALUE	TEST STANDARD
Melting temperature, 10°C/min	182 °C	ISO 11357-1/-3

# RILSAN® BESN BLACK P212 CTL

## OTHER PROPERTIES

PROPERTIES	VALUE	TEST STANDARD
Specific gravity, 23°C (73°F)	1.16 g/cm <sup>3</sup>	ISO 1183-1

## PACKAGING

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

- 20 kg / 44 lb bags
- 25 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: 230°C / 250°C / 270°C (445°F / 480°F / 520°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
- Electrostatic discharge (ESD)
- 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