

# RILSAN®

## BESN BLACK P20 TL

PA11-P,E HL, 22-005

**Rilsan® BESN BLACK P20 TL resin** is a polyamide 11 produced from a renewable source. This black grade is plasticized and designed for extrusion.

The percentage of renewable carbon according to ASTM D 6866 (calculated) is **>92%**.

PROPERTIES	DRY / COND	UNIT	TEST STANDARD
MECHANICAL PROPERTIES			
Tensile Modulus	- / 560	MPa	ISO 527-1/-2
	- /	psi	
Yield stress	81200 - / 32	MPa	ISO 527-1/-2
	- / 4640	psi	
Yield strain	- / 33	%	ISO 527-1/-2
Nominal Strain at Break	- / >50	%	ISO 527-1/-2
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	- / 70	kJ/m²	ISO 179/1eA
	- / 33.3	ftlb/in²	
Charpy Notched Impact Strength, -30°C	- / 10	kJ/m²	ISO 179/1eA
	- / 4.76	ftlb/in²	
THERMAL PROPERTIES			
Melting Temperature, 10°C/min	182 / *	°C	ISO 11357-1/-3
Temp. of Deflection Under Load, 1.80 MPa	47 / *	°C	ISO 75-1/-2
	117 / *	°F	
Temp. of Deflection Under Load, 0.45 MPa	135 / *	°C	ISO 75-1/-2
	275 / *	°F	
OTHER PROPERTIES			
Water Absorption	1.8 / *	%	Sim. to ISO 62
Density	1040 / 1040	kg/m³	ISO 1183
	1.04 / 1.04	g/cm³	
%Bio-Based	92	-	ASTM D6866

### MAIN APPLICATIONS:

- Fluid transportation
- Tubing for use in motor vehicle

### PACKAGING:

This grade is delivered dried in sealed packaging (25 kg bags / 550 kg rigid containers) ready to be processed.

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### 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) : 230°C / 250°C / 280°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> Profile Extrusion, Other Extrusion	
<b>DELIVERY FORM</b> Pellets	
<b>ADDITIVES</b> Lubricants, Plasticizer	
<b>SPECIAL CHARACTERISTICS</b> Bio-Based, Heat Stabilized, Light Stabilized	
<b>REGIONAL AVAILABILITY</b> North America, Europe, Asia Pacific, South and Central America, Near East/Africa	