+135-3858-6433 (GuangDong)
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RILSAN®

TECHNICAL DATA SHEET

RILSAN® BESN BLACK P210 TL

POLYAMIDE 11 PELLET

RILSAN® BESN BLACK P210 TL is a polyamide 11 compound. It is produced from a renewable & sustainable source (castor oil). This plasticized and impact-modified grade is designed for tube extrusion, it's a market reference to produce air brake tubing (PHLY) & automotive fluid transfer lines (incl. fuel & cooling).

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

TYPE

PA11-IP

MAIN APPLICATIONS

- Auto - Diesel Lines
- Auto - Water Cooling Circuit
- Auto - Gasoline Lines
- Auto - CNG-LPG-LNG Lines & Tanks
- Auto - SCR Lines & Tanks
- Auto - Vacuum & Blow By Lines
- Heavy Truck - Air Brake Lines

DELIVERY FORM

- Pellets

TRANSFORMATION PROCESSES

- Extrusion - General
- Tube Extrusion

ADDITIVES

- Heat Stabilized
- Light Stabilized
- Plasticizer

MECHANICAL PROPERTIES

PROPERTIES	DRY / COND VALUE*	UNIT	TEST STANDARD
Tensile modulus, 23°C (73°F), 1 mm/min	610 / 520	MPa	ISO 527-1/-2
Yield stress, 23°C (73°F), 50 mm/min	29 / 29	MPa	ISO 527-1/-2
Yield strain, 23°C (73°F), 50 mm/min	25 / 25	%	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)	- / 525	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)	- / 76	kJ/m2	ISO 179 1eA
Charpy notched impact strength, -30°C (-22°F)	- / 10	kJ/m2	ISO 179 1eA

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

ARKEMA

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THERMAL PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Melting temperature, 10°C/min	184	°C	ISO 11357-1/-3
Heat deflection temperature, 0.45 MPa	110	°C	ISO 75-1/-2
Heat deflection temperature, 1.8 MPa	45	°C	ISO 75-1/-2
Burning behavior, minimum thickness 1.5 mm	HB		IEC 60695-11-10
Burning behavior, minimum thickness 3.0 mm	HB		IEC 60695-11-10
Yellow card available	YES		

OTHER PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Specific gravity, 23°C (73°F)	1.03	g/cm³	ISO 1183-1
Bio-based carbon content, Measured	89	%	ASTM D6866

PACKAGING

Available packaging:
- 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
- Low oligomers