

TECHNICAL DATA SHEET

RILSAN® BMV WHITE5 P20 D

POLYAMIDE 11 PELLET

RILSAN® BMV WHITE5-P20-D is a polyamide 11 compound. It is produced from a renewable & sustainable source (castor oil). This grade is designed for injection molding

TYPE

PA11

MAIN APPLICATIONS

- Outdoor - Balls/Shuttlecock

DELIVERY FORM

- Pellets

TRANSFORMATION PROCESSES

- Injection Molding

RHEOLOGICAL PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Shrinkage, Parallel (t+24h)	1.5	%	ISO 294-4
Shrinkage, Normal (t+24h)	1.5	%	ISO 294-4

MECHANICAL PROPERTIES

PROPERTIES	DRY / COND VALUE*	UNIT	TEST STANDARD
Hardness, Shore D, 15 s	- / 61		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	- / 30	%	ISO 527-1/-2
Yield stress, 23°C (73°F), 50 mm/min	- / 32	MPa	ISO 527-1/-2
Tensile modulus, 23°C (73°F), 1 mm/min	- / 515	MPa	ISO 527-1/-2
Charpy notched impact strength, 23°C (73°F)	- / 95	kJ/m2	ISO 179 1eA
Charpy notched impact strength, -30°C (-22°F)	- / 6	kJ/m2	ISO 179 1eA
Flexural modulus, 23°C (73°F)	- / 435	MPa	ISO 178

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

THERMAL PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Melting temperature, 10°C/min	186	°C	ISO 11357-1/-3

OTHER PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Specific gravity, 23°C (73°F)	1.04	g/cm³	ISO 1183-1

RILSAN® BMV WHITE5 P20 D

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: 250°C / 270°C / 290°C (480°F / 520°F / 555°F)
- Typical mold temperature - Injection molding: 40-90°C (105-195°F)
- Drying time and temperature: 80-90°C (175-195°F) / 4-6 hours

SPECIAL CHARACTERISTICS

- Bio-based
- Low oligomers