

TECHNICAL DATA SHEET

RILSAN® CLEAR G170

AMORPHOUS POLYAMIDE PELLET

RILSAN® CLEAR G170 is a high performance transparent polyamide resin with outstanding thermal resistance. This grade has been designed for injection molding applications.

TYPE

PA*

MAIN APPLICATIONS

- Other Sport Equipment
- Health - Consumable - Others
- Accessories
- Laptop / Desktop
- Others
- Home Appliance
- Industry - Distribution

DELIVERY FORM

- Pellets

TRANSFORMATION PROCESSES

- Injection Molding

ADDITIVES

- Heat Stabilized

RHEOLOGICAL PROPERTIES

特性	价值	UNIT	测试标准
Shrinkage, Parallel (t+24h)	1.1	%	ISO 294-4
Shrinkage, Normal (t+24h)	1.1	%	ISO 294-4
Melt volume flow rate (MVR), 275°C / 2.16 kg (527°F / 4.4 lb)	2	cm³/10min	ISO 1133

MECHANICAL PROPERTIES

特性	DRY / COND VALUE*	UNIT	测试标准
Hardness, Shore D, 15 s	- / 79		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 / No Break		ISO 179 1eU
Nominal strain at break, 23°C (73°F), 50 mm/min	30 / > 50	%	ISO 527-1/-2
Yield strain, 23°C (73°F), 50 mm/min	8 / 9	%	ISO 527-1/-2
Yield stress, 23°C (73°F), 50 mm/min	76 / 74	MPa	ISO 527-1/-2
Tensile modulus, 23°C (73°F), 1 mm/min	2100 / 2020	MPa	ISO 527-1/-2
Charpy notched impact strength, 23°C (73°F)	- / 13	kJ/m²	ISO 179 1eA
Charpy notched impact strength, -30°C (-22°F)	- / 13	kJ/m²	ISO 179 1eA
Flexural modulus, 23°C (73°F)	- / 1980	MPa	ISO 178

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

RILSAN® CLEAR G170

THERMAL PROPERTIES

特性	价值	UNIT	测试标准
Glass transition temperature, 10°C/min	168	°C	ISO 11357-1/-2
Vicat softening temperature, 50N at 50°C/h	160	°C	ISO 306
Yellow card available	YES		
Heat deflection temperature, 0.45 MPa	150	°C	ISO 75-1/-2
Heat deflection temperature, 1.8 MPa	136	°C	ISO 75-1/-2
, minimum thickness 0.8 mm	HB		IEC 60695-11-10
, minimum thickness 1.5 mm	V-2		IEC 60695-11-10

ELECTRICAL PROPERTIES

特性	DRY / COND VALUE*	UNIT	测试标准
Surface resistivity, 23°C (73°F)	- / 1.0E+12	ohm/sq	IEC 62631-3-2
Volumic (transversal) resistivity, 23°C (73°F)	- / 1.0E+11	ohm/m	IEC 62631-3-1
Comparative tracking index, 23°C (73°F)	- / 600		IEC 60112
Dielectric stress, 23°C (73°F)	- / 50		IEC 60243-1

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

OTHER PROPERTIES

特性	价值	UNIT	测试标准
Moisture absorption, At equilibrium at 23°C (73°F) / 50%HR	1.7	%	ISO 62
Water absorption, 23°C(73°F), immersion, equilibrium	3.8	%	ISO 62
Specific gravity, 23°C (73°F)	1.05	g/cm³	ISO 1183-1

包装

Available packaging:
• 25 公斤 / 55 磅 袋

保质期

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:

- 典型熔融温度 (最小/推荐/最大) ——注塑成型: 270°C / 290°C / 310°C (520°F / 555°F / 590°F)
- 典型模具温度——注塑成型: 20-80°C (70-175°F)
- Drying time and temperature: 90°C (195°F) / 4-6 hours

SPECIAL CHARACTERISTICS

- Transparent

RILSAN® CLEAR G170

DIAGRAMS

