

TECHNICAL DATA SHEET

RILSAMID® AZM 30 BLACK T6LD

POLYAMIDE 12 PELLET

RILSAMID® AZM 30 BLACK T6LD resin is a polyamide 12 compound. This glass fiber reinforced grade is designed for injection molding and is a market standard to produce automotive fittings & quick connectors.

Designation : ISO 16396 - PA12, GF30, M1G1HLR, C16-070

TYPE

PA12-GF30

MAIN APPLICATIONS

- Auto - Fluid Connectors
- Heavy Truck - Air Brake Connectors

DELIVERY FORM

- Pellets

TRANSFORMATION PROCESSES

- Injection Molding

ADDITIVES

- Heat Stabilized
- Light Stabilized
- Release agent

RHEOLOGICAL PROPERTIES

特性	价值	UNIT	测试标准
Melt volume flow rate (MVR), 235°C / 5 kg (455°F / 11 lb)	7	cm³/10min	ISO 1133
Shrinkage, Parallel (t+24h)	0.2	%	ISO 294-4
Shrinkage, Normal (t+24h)	0.6	%	ISO 294-4

MECHANICAL PROPERTIES

特性	DRY / COND VALUE*	UNIT	测试标准
Flexural modulus, 23°C (73°F)	6100 / 5900	MPa	ISO 178
Tensile modulus, 23°C (73°F), 1 mm/min	6950 / 6650	MPa	ISO 527-1/-2
Yield stress, 23°C (73°F), 50 mm/min	115 / 110	MPa	ISO 527-1/-2
Yield strain, 23°C (73°F), 50 mm/min	3.3 / 3.5	%	ISO 527-1/-2
Nominal strain at break, 23°C (73°F), 50 mm/min	4.4 / 5.1	%	
Charpy unnotched impact strength, 23°C (73°F)	80 / 76	kJ/m2	ISO 179 1eU
Charpy unnotched impact strength, -30°C (-22°F)	84 / 80	kJ/m2	ISO 179 1eU
Charpy notched impact strength, 23°C (73°F)	21 / 17	kJ/m2	ISO 179 1eA
Charpy notched impact strength, -30°C (-22°F)	13 / 11	kJ/m2	ISO 179 1eA

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

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THERMAL PROPERTIES

特性	价值	UNIT	测试标准
Melting temperature, 10°C/min	177	°C	ISO 11357-1/-3
Vicat softening temperature, 50N at 50°C/h	165	°C	ISO 306
Heat deflection temperature, 0.45 MPa	176	°C	ISO 75-1/-2
Heat deflection temperature, 1.8 MPa	163	°C	ISO 75-1/-2
Thermal Degradation temperature, Under air at 10°C/min (1%_wt_Loss)	227	°C	ISO 11358-1
Thermal Degradation temperature, Under nitrogen at 10°C/min (1%_wt_Loss)	224	°C	ISO 11358-1
, minimum thickness 1.5 mm	HB		IEC 60695-11-10
	HB		IEC 60695-11-10
	HB		IEC 60695-11-10
Yellow card available	YES		

ELECTRICAL PROPERTIES

特性	DRY / COND VALUE*	UNIT	测试标准
Surface resistivity, 23°C (73°F)	- / 1.0E+14	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 Strength, 23°C (73°F)	35 / 35	kV/mm	IEC 60243-1
Relative permittivity, 100Hz	4 / -		
Relative permittivity, 1Mhz	3 / -		
Dissipation factor, 100Hz	664 / -	E-4	
Dissipation factor, 1Mhz	274 / -	E-4	

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COND: Conditionned.

OTHER PROPERTIES

特性	价值	UNIT	测试标准
Specific gravity, 23°C (73°F)	1.24	g/cm³	ISO 1183-1
Moisture absorption, At equilibrium at 23°C (73°F) / 50%HR	0.5	%	ISO 62
Water absorption, 23°C(73°F), immersion, equilibrium	1.3	%	ISO 62

包装

Available packaging:
• 25 公斤 / 55 磅 袋

RILSAMID® AZM 30 BLACK T6LD

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: 250°C / 270°C / 290°C (480°F / 520°F / 555°F)
- 典型模具温度——注塑成型: 40-90°C (105-195°F)
- Drying time and temperature: 80-90°C (175-195°F) / 4-6 hours

DIAGRAMS

