

TECHNICAL DATA SHEET

RILSAMID® AZM 50 BLACK T6LD

POLYAMIDE 12 PELLET

RILSAN® AZM 50 BLACK T6LD is a polyamide 12 compound. This glass fiber reinforced grade is designed for injection molding and is used to produce air brake or automotive fittings & quick connectors, the incorporation of a high amount of glass fibers leading to a very rigid and tough product.

Designation : ISO 16396 - PA12, GF50, M1G1HLR, C16-120

DESIGNATION

PA12-GF50

DELIVERY FORM

- Pellets

TRANSFORMATION PROCESSES

- Injection Molding

ADDITIVES

- Heat Stabilized
- Light Stabilized
- Release agent

RHEOLOGICAL PROPERTIES

속성	값	테스트 표준
Melt volume flow rate (MVR), 235°C / 5 kg (455°F / 11 lb)	6 cm ³ /10min	ISO 1133
Shrinkage, Parallel (t+24h)	0.2 %	ISO 294-4
Shrinkage, Normal (t+24h)	0.7 %	ISO 294-4

MECHANICAL PROPERTIES

속성	DRY / COND VALUE*	테스트 표준
Tensile modulus, 23°C (73°F), 1 mm/min	12500 / 12000 MPa	ISO 527-1/-2
Yield stress, 23°C (73°F), 50 mm/min	153 / 145 MPa	ISO 527-1/-2
Yield strain, 23°C (73°F), 50 mm/min	3.8 / 3.6 %	ISO 527-1/-2
Stress at break, 23°C (73°F), 50 mm/min	152 / 144 MPa	ISO 527-1/-2
Nominal strain at break, 23°C (73°F), 50 mm/min	4.6 / 4.9 %	ISO 527-1/-2
Flexural modulus, 23°C (73°F)	- / 8300 MPa	ISO 178
Charpy unnotched impact strength, 23°C (73°F)	84 / 80 kJ/m ²	ISO 179 1eU
Charpy unnotched impact strength, -30°C (-22°F)	90 / 84 kJ/m ²	ISO 179 1eU
Charpy notched impact strength, 23°C (73°F)	- / 22 kJ/m ²	ISO 179 1eA
Charpy notched impact strength, -30°C (-22°F)	15 / 15 kJ/m ²	ISO 179 1eA

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

속성	값	테스트 표준
Melting temperature, 10°C/min	175 °C	ISO 11357-1/-3
Thermal Degradation temperature, Under air at 10°C/min (1%_wt_Loss)	224 °C	ISO 11358-1
Thermal Degradation temperature, Under nitrogen at 10°C/min (1%_wt_Loss)	224 °C	ISO 11358-1

OTHER PROPERTIES

속성	값	테스트 표준
Specific gravity, 23°C (73°F)	1.47 g/cm ³	ISO 1183-1

PACKAGING

This grade is delivered dried in sealed packaging ready to be processed. Available packaging:

- 26 kg / 55 lb bags

SHELF LIFE

Six months 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: 270°C / 285°C / 300°C (520°F / 545°F / 570°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

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