

## TECHNICAL DATA SHEET

# RILSAMID® AZM 23 BLACK T6LD

## POLYAMIDE 12 PELLET

RILSAMID® AZM 23 BLACK T6LD resin is a polyamide 12 compound. This glass fiber reinforced grade is designed for injection molding and is used to produce automotive fittings & quick connectors.

Designation : ISO 16396 - PA12, GF23, M1G1HLR, C16-060

### DESIGNATION

PA12-GF23

### 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

プロパティ	価値	テスト基準
Melt volume flow rate (MVR), 235°C / 5 kg (455°F / 11 lb)	13 cm <sup>3</sup> /10min	ISO 1133
Shrinkage, Parallel (t+24h)	0.2 %	ISO 294-4
Shrinkage, Normal (t+24h)	0.4 %	ISO 294-4

## MECHANICAL PROPERTIES

プロパティ	DRY / COND VALUE*	テスト基準
Tensile modulus, 23°C (73°F), 1 mm/min	5500 / 5100 MPa	ISO 527-1/-2
Yield stress, 23°C (73°F), 50 mm/min	101 / 105 MPa	ISO 527-1/-2
Yield strain, 23°C (73°F), 50 mm/min	3 / 3.5 %	ISO 527-1/-2
Nominal strain at break, 23°C (73°F), 50 mm/min	5 / 5.2 %	ISO 527-1/-2
Flexural modulus, 23°C (73°F)	- / 4490 MPa	ISO 178
Charpy unnotched impact strength, 23°C (73°F)	66 / 77 kJ/m <sup>2</sup>	ISO 179 1eU
Charpy unnotched impact strength, -30°C (-22°F)	66 / 83 kJ/m <sup>2</sup>	ISO 179 1eU
Charpy notched impact strength, 23°C (73°F)	- / 15 kJ/m <sup>2</sup>	ISO 179 1eA
Charpy notched impact strength, -30°C (-22°F)	8 / 12 kJ/m <sup>2</sup>	ISO 179 1eA

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

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## THERMAL PROPERTIES

プロパティ	価値	テスト基準
Melting temperature, 10°C/min	179 °C	ISO 11357-1/-3
Vicat softening temperature, 50N at 50°C/h	165 °C	ISO 306
Heat deflection temperature, 0.45 MPa	173 °C	ISO 75-1/-2
Heat deflection temperature, 1.8 MPa	165 °C	ISO 75-1/-2
Thermal Degradation temperature, Under air at 10°C/min (1%_wt_Loss)	222 °C	ISO 11358-1
Thermal Degradation temperature, Under nitrogen at 10°C/min (1%_wt_Loss)	223 °C	ISO 11358-1

## ELECTRICAL PROPERTIES

プロパティ	DRY / COND VALUE*	テスト基準
Comparative tracking index, 23°C (73,4°F)	- / 600	IEC 60112
Relative permittivity, 100Hz	- / 5	IEC 60250
Relative permittivity, 1Mhz	- / 5	IEC 60250
Dissipation factor, 100Hz	- / 1170	IEC 60250
Dissipation factor, 1Mhz	- / 1170	IEC 60250

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COND: Conditionned.

## OTHER PROPERTIES

プロパティ	価値	テスト基準
Specific gravity, 23°C (73°F)	1.18 g/cm <sup>3</sup>	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

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

- 25 kg / 55 lb bags
- 454 kg / 1000 lb rigid containers

## 賞味期限

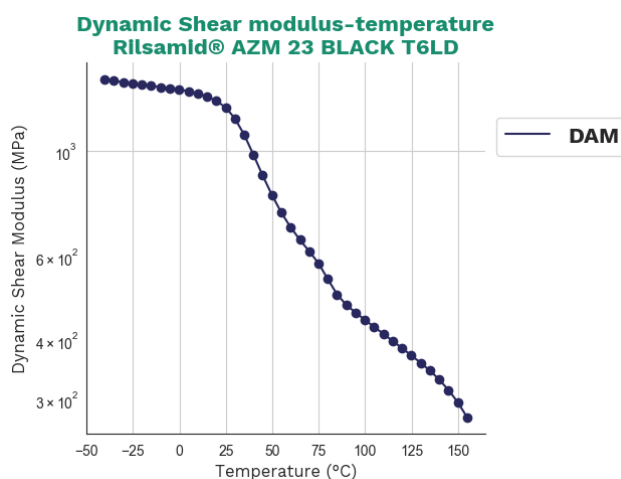
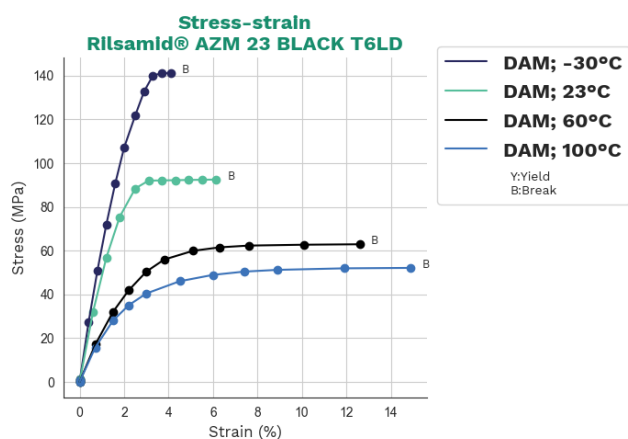
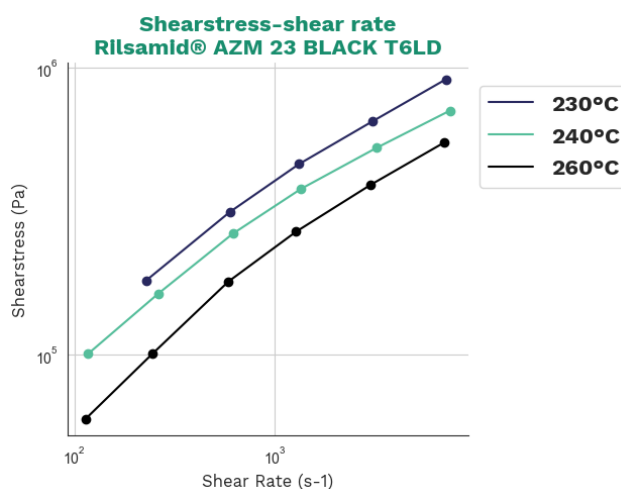
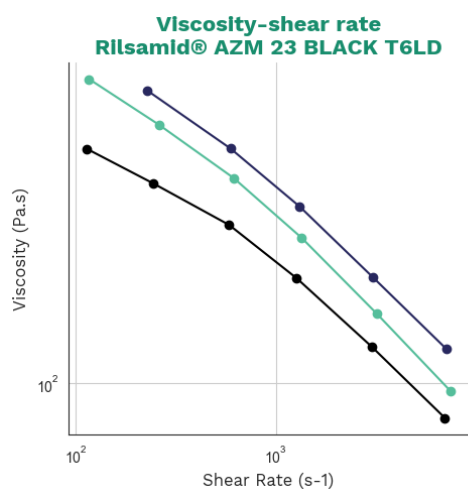
Two years from the date of delivery, when stored properly (sealed bags, appropriate moisture, UV protection and temperature). For any use above this limit, please refer to our technical services.

## PROCESSING CONDITIONS:

- 典型的な溶融温度 (最小 / 推奨 / 最大) - 射出成形: 250°C / 270°C / 290°C (480°F / 520°F / 555°F)
- 典型的な金型温度 - 射出成形: 40-90°C (105-195°F)
- Drying time and temperature: 80-90°C (175-195°F) / 4-6 hours

# RILSAMID® AZM 23 BLACK T6LD

## DIAGRAMS



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