

TECHNICAL DATA SHEET

RILSAMID® AMVO TLD

POLYAMIDE 12 PELLET

RILSAMID® AMVO TLD is a polyamide 12 compound. This natural grade is designed for injection molding.

Designation : ISO 16396 - PA12, M1G1HLR, C16-010

DESIGNATION

PA12

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 / 2.16 kg (455°F / 4.4 lb)	18 cm ³ /10min	ISO 1133
Shrinkage, Parallel (t+24h)	1.1 %	ISO 294-4
Shrinkage, Normal (t+24h)	1.4 %	ISO 294-4

MECHANICAL PROPERTIES

속성	DRY / COND VALUE*	테스트 표준
Hardness, Shore D, 15 s	- / 72	ISO 868
Charpy unnotched impact strength, 23°C (73°F)	No Break / 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	> 50 / > 50 %	ISO 527-1/-2
Yield strain, 23°C (73°F), 50 mm/min	7 / 7 %	ISO 527-1/-2
Yield stress, 23°C (73°F), 50 mm/min	44 / 42 MPa	ISO 527-1/-2
Tensile modulus, 23°C (73°F), 1 mm/min	1400 / 1260 MPa	ISO 527-1/-2
Charpy notched impact strength, 23°C (73°F)	- / 5 kJ/m ²	ISO 179 1eA
Charpy notched impact strength, -30°C (-22°F)	5 / 5 kJ/m ²	ISO 179 1eA
Flexural modulus, 23°C (73°F)	- / 950 MPa	ISO 178

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

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속성	값	테스트 표준
Vicat softening temperature, 50N at 50°C/h	142 °C	ISO 306
Heat deflection temperature, 0.45 MPa	135 °C	ISO 75-1/-2
Heat deflection temperature, 1.8 MPa	55 °C	ISO 75-1/-2
Melting temperature, 10°C/min	178 °C	ISO 11357-1/-3

THERMAL PROPERTIES/ELECTRICAL PROPERTIES

속성	DRY / COND VALUE*	테스트 표준
Surface resistivity, 23°C (73,4°F)	- / 1.0E+14 ohm/sq	IEC 62631-3-2
Volumic (transversal) resistivity, 23°C (73,4°F)	- / 1.0E+12 ohm/m	IEC 62631-3-1
Comparative tracking index, 23°C (73,4°F)	- / 600	IEC 60112
Dielectric stress, 23°C (73,4°F)	- / 30	IEC 60243-1

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

OTHER PROPERTIES

속성	값	테스트 표준
Water absorption, 23°C (73°F), immersion, equilibrium	1.6 %	ISO 62
Specific gravity, 23°C (73°F)	1.01 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

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.

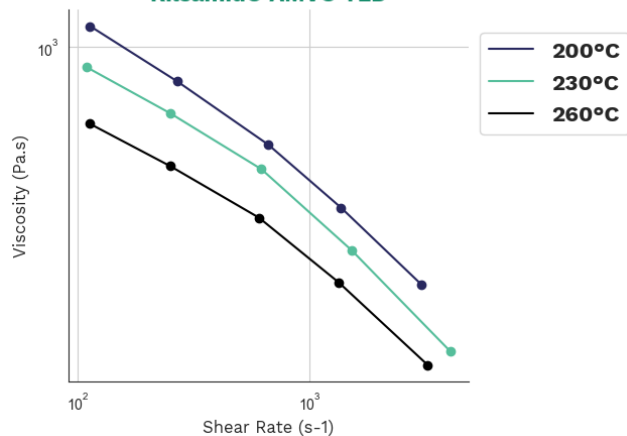
PROCESSING CONDITIONS:

- Typical melt temperature (Min / Recommended / Max) - Injection Molding: 230°C / 250°C / 270°C (445°F / 480°F / 520°F)
- Typical mold temperature - Injection molding: 20-60°C (70-140°F)
- Drying time and temperature: 80-90°C (175-195°F) / 4-6 hours

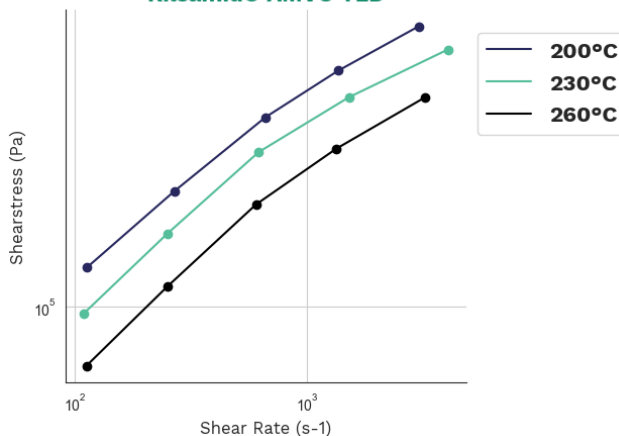
RILSAMID® AMVO TLD

DIAGRAMS

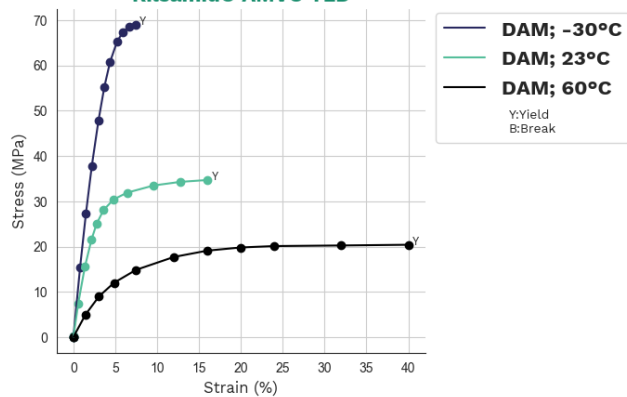
Viscosity-shear rate
Rilsamid® AMVO TLD



Shearstress-shear rate
Rilsamid® AMVO TLD



Stress-strain
Rilsamid® AMVO TLD



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