

TECHNICAL DATA SHEET

RILSAMID® MA 4411 BLACK

POLYAMIDE 12 PELLET

RILSAMID® MA 4411 BLACK a polyamide 12 compound. This plasticized and impact-modified grade is designed for tube extrusion. It is a market standard to produce automotive fuel lines.

DESIGNATION

PA12-IP

MAIN APPLICATIONS

- Auto - Diesel Lines
- Auto - Gasoline Lines

DELIVERY FORM

- Pellets

TRANSFORMATION PROCESSES

- Extrusion - General
- Tube Extrusion

ADDITIVES

- Heat Stabilized
- Light Stabilized

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)	14 cm ³ /10min	ISO 1133

MECHANICAL PROPERTIES

プロパティ	DRY / COND VALUE*	テスト基準
Hardness, Shore D, 15 s	- / 63	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	ISO 179 1eU
Nominal strain at break, 23°C (73°F), 50 mm/min	- / > 50 %	ISO 527-1/-2
Yield strain, 23°C (73°F), 50 mm/min	- / 23 %	ISO 527-1/-2
Yield stress, 23°C (73°F), 50 mm/min	- / 25 MPa	ISO 527-1/-2
Tensile modulus, 23°C (73°F), 1 mm/min	470 / 470 MPa	ISO 527-1/-2
Charpy notched impact strength, 23°C (73°F)	No Break / No Break	ISO 179 1eA
Charpy notched impact strength, -30°C (-22°F)	- / 6 kJ/m ²	ISO 179 1eA
Flexural modulus, 23°C (73°F)	- / 470 MPa	ISO 178

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

THERMAL PROPERTIES

プロパティ	価値	テスト基準
Melting temperature, 10°C/min	175 °C	ISO 11357-1/-3

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OTHER PROPERTIES

プロパティ	価値	テスト基準
Specific gravity, 23°C (73°F)	1.03 g/cm ³	ISO 1183-1

包装

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

- 25 kg / 55 lb bags

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:

- 典型的な熔融温度 (最小 / 推奨 / 最大) - 射出成形: 230°C / 250°C / 270°C (445°F / 480°F / 520°F)
- 典型的な金型温度 - 射出成形: 20-60°C (70-140°F)
- Drying time and temperature: 80-90°C (175-195°F) / 4-6 hours

REGIONAL AVAILABILITY

Europe

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