

TECHNICAL DATA SHEET RILSAMID® ASR 13

POLYAMIDE 12 PELLET

RILSAMID® ASR 13 a polyamide 12 compound. This black reinforced grade is designed for injection molding & is used to produce automotive fittings & quick connectors, the incorporation of carbon fiber leading to a product with same rigidity as a 30% glass fiber reinforced grade & electrostatic discharge (ESD) performance for conductive parts.

Designation : ISO 16396 - PA12, CF15, M1G1HL, C16-080

DESIGNATION

PA12-CF15

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)	10 cm ³ /10min	ISO 1133
Shrinkage, Parallel (t+24h)	0.2 %	ISO 294-4
Shrinkage, Normal (t+24h)	0.5 %	ISO 294-4

MECHANICAL PROPERTIES

속성	DRY / COND VALUE*	테스트 표준
Charpy unnotched impact strength, 23°C (73°F)	45 / 46 kJ/m ²	ISO 179 1eU
Charpy unnotched impact strength, -30°C (-22°F)	47 / 48 kJ/m ²	ISO 179 1eU
Tensile modulus, 23°C (73°F), 1 mm/min	9600 / 9000 MPa	ISO 527-1/-2
Charpy notched impact strength, 23°C (73°F)	- / 11 kJ/m ²	ISO 179 1eA
Charpy notched impact strength, -30°C (-22°F)	8 / 7 kJ/m ²	ISO 179 1eA
Flexural modulus, 23°C (73°F)	- / 7200 MPa	ISO 178

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

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속성	값	테스트 표준
Melting temperature, 10°C/min	178 °C	ISO 11357-1/-3
Thermal Degradation temperature, Under air at 10°C/min (1%_wt_Loss)	223 °C	ISO 11358-1
Thermal Degradation temperature, Under nitrogen at 10°C/min (1%_wt_Loss)	223 °C	ISO 11358-1

THERMAL PROPERTIES ELECTRICAL PROPERTIES

속성	DRY / COND VALUE*	테스트 표준
Surface resistivity, 23°C (73,4°F)	- / 100000 ohm/sq	IEC 62631-3-2

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

OTHER PROPERTIES

속성	값	테스트 표준
Moisture absorption, At equilibrium at 23°C (73°F) / 50%HR	0.6 %	ISO 62
Water absorption, 23°C (73°F), immersion, equilibrium	1.5 %	ISO 62
Specific gravity, 23°C (73°F)	1.08 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
- 455 kg / 1000 lb rigid containers

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: 250°C / 270°C / 290°C (480°F / 520°F / 555°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

SPECIAL CHARACTERISTICS

- Electrostatic discharge (ESD)

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