

RILSAMID®

TECHNICAL DATA SHEET

RILSAMID® AMNO

POLYAMIDE 12 PELLET

RILSAMID® AMNO is a polyamide 12 resin. This natural grade without additive is designed for injection molding.

Designation : ISO 16396 - PA12, M, C12-010

TYPE

PA12

MAIN APPLICATIONS

- Industry - Distribution
- Auto - Others Injection

DELIVERY FORM

- Pellets

TRANSFORMATION PROCESSES

- Injection Molding

RHEOLOGICAL PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Melt volume flow rate (MVR), 235°C / 2.16 kg (455°F / 4.4 lb)	57	cm³/10min	ISO 1133
Shrinkage, Parallel (t+24h)	1.1	%	ISO 294-4
Shrinkage, Normal (t+24h)	1.2	%	ISO 294-4

MECHANICAL PROPERTIES

PROPERTIES	DRY / COND VALUE*	UNIT	TEST STANDARD
Flexural modulus, 23°C (73°F)	- / 920	MPa	ISO 178
Tensile modulus, 23°C (73°F), 1 mm/min	- / 1100	MPa	ISO 527-1/-2
Yield stress, 23°C (73°F), 50 mm/min	- / 37	MPa	ISO 527-1/-2
Yield strain, 23°C (73°F), 50 mm/min	- / 8	%	ISO 527-1/-2
Stress at break, 23°C (73°F), 50 mm/min	/ 69	MPa	ISO 527-1/-2
Strain at break, 23°C (73°F), 50 mm/min	/ >200	%	ISO 527-1/-2
Charpy unnotched impact strength, 23°C (73°F)	- / No Break	kJ/m2	ISO 179 1eU
Charpy unnotched impact strength, -30°C (-22°F)	- / No Break	kJ/m2	ISO 179 1eU
Charpy notched impact strength, 23°C (73°F)	- / 5	kJ/m2	ISO 179 1eA
Charpy notched impact strength, -30°C (-22°F)	- / 6	kJ/m2	ISO 179 1eA
Hardness, Shore D, Instantaneous	/ 74		ISO 868
Hardness, Shore D, 15 s	/ 69		ISO 868

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

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THERMAL PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Melting temperature, 10°C/min	180	°C	ISO 11357-1/-3

OTHER PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Specific gravity, 23°C (73°F)	1.01	g/cm ³	ISO 1183-1

PACKAGING

Available packaging:

- 20 kg / 44 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: 210°C / 230°C / 260°C (410°F / 445°F / 500°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