

TECHNICAL DATA SHEET

RILSAMID® AMNO MED

POLYAMIDE 12 PELLET

RILSAN® AMNO MED is a polyamide 12 resin. This natural grade is designed for injection molding and is approved in medical applications. Upon request, letters regarding USP Class VI compliance can be provided.

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

TYPE

PA12

MAIN APPLICATIONS

- Health - Consumable - Others
- Health - Consumable - Catheters

DELIVERY FORM

- Pellets

TRANSFORMATION PROCESSES

- Injection Molding

RHEOLOGICAL PROPERTIES

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

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 strain, 23°C (73°F), 50 mm/min	/ 8	%	ISO 527-1/-2
Yield stress, 23°C (73°F), 50 mm/min	/ 37	MPa	ISO 527-1/-2
Strain at break, 23°C (73°F), 50 mm/min	/ >200	%	ISO 527-1/-2
Stress at break, 23°C (73°F), 50 mm/min	/ 62	MPa	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.

RILSAMID® AMNO MED

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