

PA12, KHL, 12-010

Rilsamid® AECNO TL resin is a natural polyamide 12. This grade is designed for cable coating.

Main applications:

- Wire and cable sheathing.

Packaging:

This grade is delivered dried in sealed packaging (25 kg bags) ready to be processed.

Shelf life:

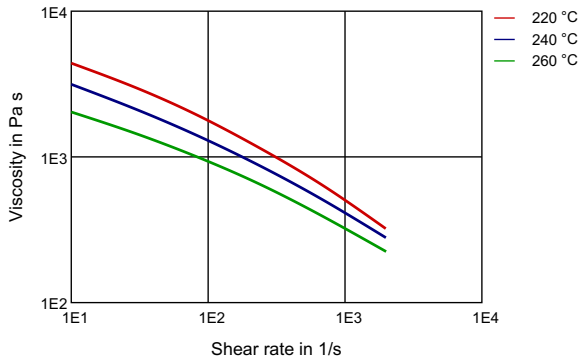
Two years from the date of delivery. For any use above this limit, please refer to our technical services.

MAIN CHARACTERISTICS

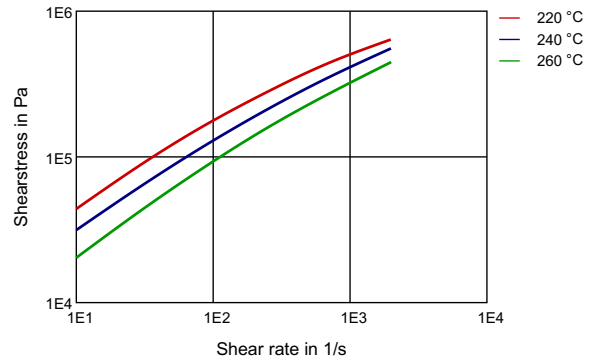
PROPERTIES	DRY / COND	UNIT	TEST STANDARD
Tensile Modulus	- / 1250	MPa	ISO 527-1/-2
Yield stress	- / 43	MPa	ISO 527-1/-2
Yield strain	- / 5	%	ISO 527-1/-2
Nominal strain at break	- / >50	%	ISO 527-1/-2
Shore D hardness, 15s	71 / *	-	ISO 7619-1
Charpy Impact Strength, +23°C	- / N	kJ/m ²	ISO 179/1eU
Charpy Impact Strength, -30°C	- / N	kJ/m ²	ISO 179/1eU
Charpy Notched Impact Strength, +23°C	- / 5	kJ/m ²	ISO 179/1eA
Charpy Notched Impact Strength, -30°C	- / 7	kJ/m ²	ISO 179/1eA
Melting temperature, 10°C/min	178 / *	°C	ISO 11357-1/-3
Density	1010 / 1010	kg/m ³	ISO 1183
Injection Molding, melt temperature	260	°C	ISO 294
Injection Molding, mold temperature	50	°C	ISO 10724
Injection Molding, pressure at hold	16	MPa	ISO 294

Diagrams

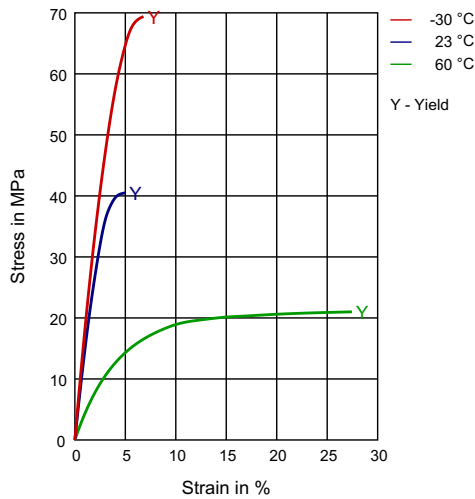
Viscosity-shear rate



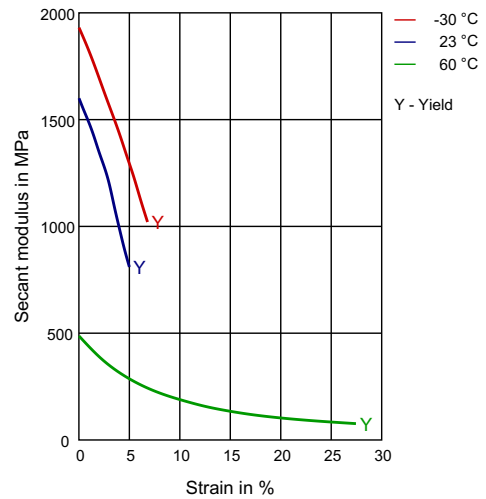
Shearstress-shear rate



Stress-strain



Secant modulus-strain



Processing conditions:

Typical melt temperature (Min / recommended / Max): 240°C / 250°C / 260°C

Drying time and temperature (only necessary for bags opened more than two hours): 4 - 8 hours at 80°C

Processing

Injection Molding, Other Extrusion, Coating

Special Characteristics

Light stabilized or stable to light, U.V. stabilized or stable to weather, Heat stabilized or stable to heat

Delivery form

Pellets

Additives

Lubricants

Chemical Media Resistance

Acids

- ✓ Acetic Acid (5% by mass) (23°C)
- ✓ Citric Acid solution (10% by mass) (23°C)
- ✓ Lactic Acid (10% by mass) (23°C)
- ⊘ Hydrochloric Acid (36% by mass) (23°C)
- ⊘ Nitric Acid (40% by mass) (23°C)
- ⊘ Sulfuric Acid (38% by mass) (23°C)
- ✓ Sulfuric Acid (5% by mass) (23°C)
- ⊘ Chromic Acid solution (40% by mass) (23°C)

Bases

- ✓ Sodium Hydroxide solution (35% by mass) (23°C)
- ✓ Sodium Hydroxide solution (1% by mass) (23°C)
- ✓ Ammonium Hydroxide solution (10% by mass) (23°C)

Alcohols

- ✓ Methanol (23°C)
- ✓ Ethanol (23°C)

Hydrocarbons

- ✓ n-Hexane (23°C)
- ✓ Toluene (23°C)

Ketones

- ✓ Acetone (23°C)

Mineral oils

- ✓ SAE 10W40 multigrade motor oil (23°C)

Regional Availability

North America, Europe, Asia Pacific, South and Central America, Near East/Africa

RILSAMID® AECNO TL

- ✓ SAE 10W40 multigrade motor oil (130°C)
- ✓ SAE 80/90 hypoid-gear oil (130°C)
- ✓ Insulating Oil (23°C)

Standard Fuels

- ✓ ISO 1817 Liquid 1 (60°C)
- ✓ ISO 1817 Liquid 2 (60°C)
- ✓ ISO 1817 Liquid 3 (60°C)
- ✓ ISO 1817 Liquid 4 (60°C)
- ✓ Standard fuel without alcohol (pref. ISO 1817 Liquid C) (23°C)
- ✓ Standard fuel with alcohol (pref. ISO 1817 Liquid 4) (23°C)
- ✓ Diesel fuel (pref. ISO 1817 Liquid F) (23°C)
- ✓ Diesel fuel (pref. ISO 1817 Liquid F) (90°C)
- ✓ Diesel fuel (pref. ISO 1817 Liquid F) (>90°C)

Salt solutions

- ✓ Sodium Chloride solution (10% by mass) (23°C)
- ✓ Sodium Hypochlorite solution (10% by mass) (23°C)
- ✓ Zinc Chloride solution (50% by mass) (23°C)

Other

- ✓ Ethyl Acetate (23°C)
- ✓ Hydrogen peroxide (23°C)
- ✓ DOT No. 4 Brake fluid (130°C)
- ✓ Ethylene Glycol (50% by mass) in water (108°C)

Please consult Arkema's disclaimer regarding the use of Arkema's products on <https://www.arkema.com/en/products/product-safety/disclaimer/index.html>

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