

Rilsamid® AESNO 14 TL

PA12

Rilsamid® AESNO 14 TL (PA12, EHL, 22-010) resin

Rilsamid® AESNO 14 TL resin is a polyamide 12.

This grade is designed for extrusion and specially dedicated for application where transparency is required.

Rheological properties	dry / cond	Unit	Test Standard
Melt volume-flow rate, MVR	2.1 / *	cm ³ /10min	ISO 1133
Temperature	235 / *	°C	-
Load	5 / *	kg	-

Mechanical properties	dry / cond	Unit	Test Standard
Tensile Modulus	- / 1125	MPa	ISO 527-1/-2
Yield stress	- / 34	MPa	ISO 527-1/-2
Yield strain	- / 11	%	ISO 527-1/-2
Nominal strain at break	- / >50	%	ISO 527-1/-2
Charpy impact strength, +23°C	N / N	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	N / N	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	- / 63	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	- / 11	kJ/m ²	ISO 179/1eA

Thermal properties	dry / cond	Unit	Test Standard
Melting temperature, 10°C/min	178 / *	°C	ISO 11357-1/-3
Burning Behav. at 1.5 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	1.6 / *	mm	-
Burning Behav. at thickness h	HB / *	class	IEC 60695-11-10
Thickness tested	3.2 / *	mm	-

Other properties	dry / cond	Unit	Test Standard
Density	1010 / 1010	kg/m ³	ISO 1183

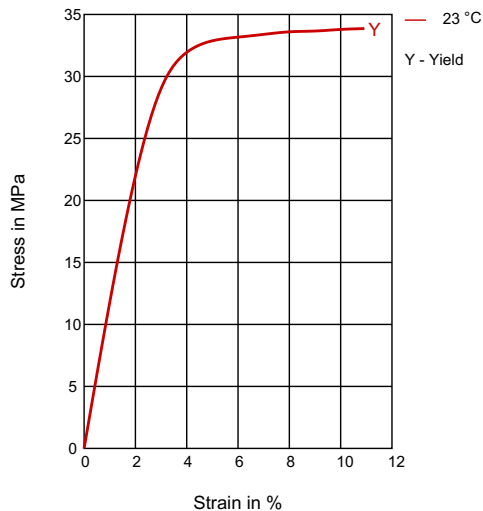
Test specimen production	Value	Unit	Test Standard
Injection Molding, melt temperature	280	°C	ISO 294
Injection Molding, mold temperature	50	°C	ISO 10724
Injection Molding, pressure at hold	16	MPa	ISO 294

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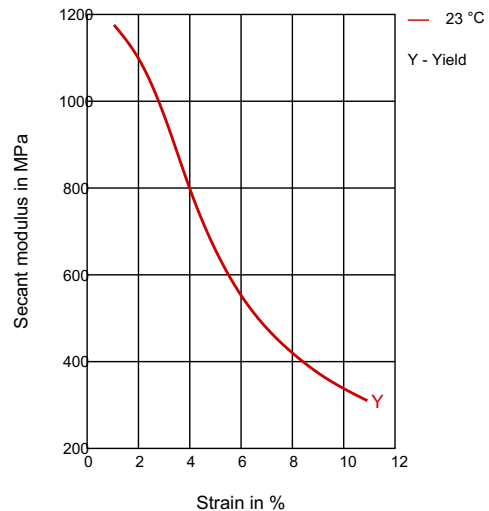
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Diagrams

Stress-strain



Secant modulus-strain



Characteristics

Processing

Profile Extrusion, Sheet Extrusion, Other Extrusion

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

Special Characteristics

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

Regional Availability

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

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

Ketones

- ✓ Acetone (23°C)

Mineral oils

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