

RILSAN® BESNO P20 TL

PA11-P, EHL, 22-005

Rilsan® BESNO P20 TL resin is a polyamide 11 produced from a renewable source. This natural grade is plasticized and designed for extrusion.

The percentage of renewable carbon according to ASTM D 6866 is **94%**.

PROPERTIES	DRY / COND	UNIT	TEST STANDARD
RHEOLOGICAL PROPERTIES			
Melt Volume-Flow Rate	2 / *	cm ³ /10 min	ISO 1133
Temperature	235 / *	°C	-
	455 / *	°F	-
Load	5 / *	kg	-
	11 / *	lb	-
MECHANICAL PROPERTIES			
Tensile Modulus	- / 510	MPa	ISO 527-1/-2
	- / 74000	psi	
Yield Stress	- / 31	MPa	ISO 527-1/-2
	- / 4500	psi	
Yield Strain	- / 40	%	ISO 527-1/-2
Nominal Strain at Break	- / >50	%	ISO 527-1/-2
Shore D Hardness, after 15 s	64 / *	-	ISO 868
Charpy Impact Strength, +23°C	- / No Break	kJ/m ²	ISO 179/1eU
Charpy Impact Strength, -30°C	- / No Break	kJ/m ²	ISO 179/1eU
Charpy Notched Impact Strength, +23°C	- / No Break	kJ/m ²	ISO 179/1eA
Charpy Notched Impact Strength, -30°C	- / 11	kJ/m ²	ISO 179/1eA
	- / 5.23	ftlb/in ²	
THERMAL PROPERTIES			
Melting Temperature, 10°C/min	182 / *	°C	ISO 11357-1/-3
Temp. of Deflection Under Load, 1.80 MPa	47 / *	°C	ISO 75-1/-2
	117 / *	°F	
Temp. of Deflection Under Load, 0.45 MPa	135 / *	°C	ISO 75-1/-2
	275 / *	°F	
Vicat Softening Temperature, 50°C/h 50N	146 / *	°C	ISO 306
	295 / *	°F	
Coeff. of Linear Thermal Expansion, parallel	100 / *	E-6/K	ISO 11359-1/-2
ELECTRICAL PROPERTIES			

Arkema France - A French "société anonyme", registered in the Nanterre (France) Trade and Companies Register under the number 319 632 790 SDC/11-2018
 Source: automatically generated TDS from Material Database on 20-06-2024

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Volume Resistivity	- / 1E10	Ohm* m	IEC 62631-3-1
Surface Resistivity	* / 2E12	Ohm	IEC 62631-3-2
Dielectric (Electric) Strength	- / 24	kV/mm	IEC 60243-1
	- / 610	kV/in	
OTHER PROPERTIES			
%Bio-Based	94	-	ASTM D6866
Water Absorption, 23°C, immersion, equilibrium	1.8 / *	%	ISO 62
Density	1040 / 1040	kg/m ³	ISO 1183
	1.04 / 1.04	g/cm ³	

MAIN APPLICATIONS:

- Fluid transportation
- Fuel line
- Tubing for use in motor vehicle
- Air brake line

PACKAGING:

This grade is delivered dried in sealed packaging (25 kg bags, 1000 lb rigid containers) ready to be processed.

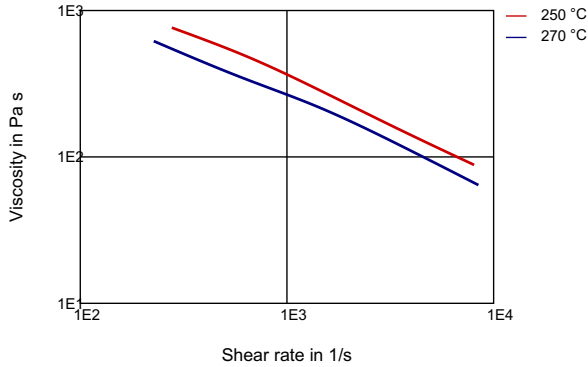
SHELF LIFE:

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

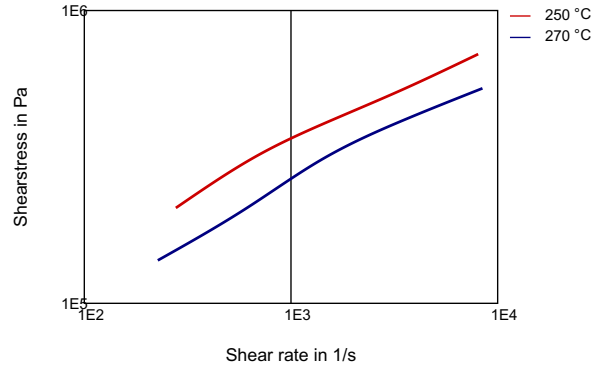
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DIAGRAMS

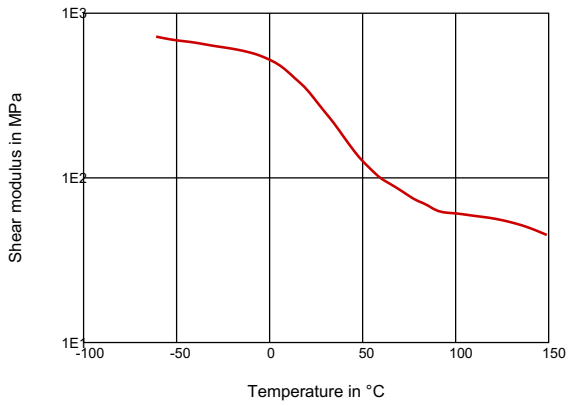
VISCOSITY-SHEAR RATE



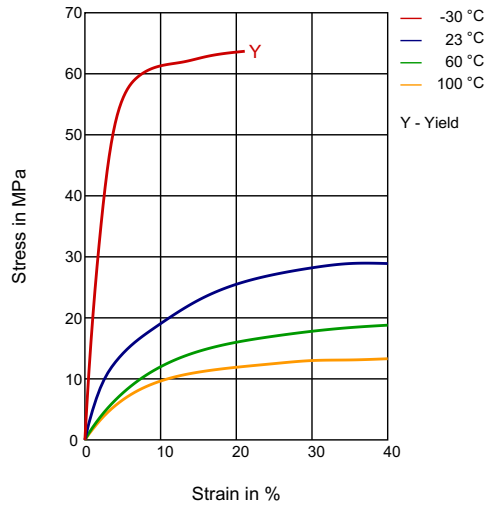
SHEARSTRESS-SHEAR RATE



DYN. SHEAR MODULUS-TEMPERATURE



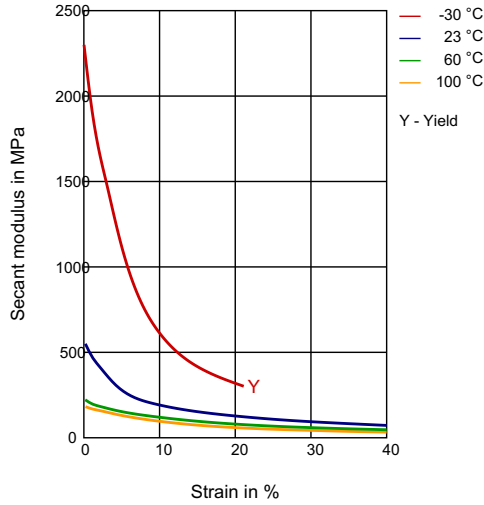
STRESS-STRAIN



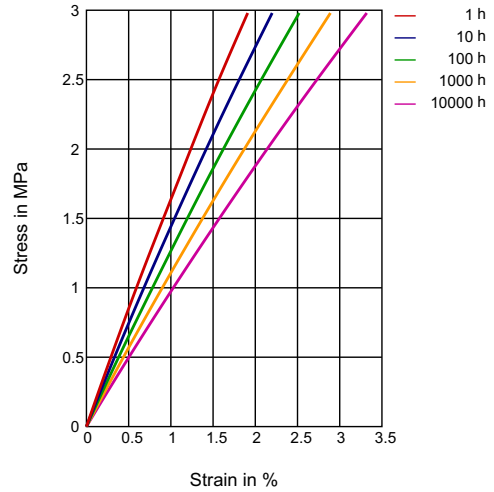
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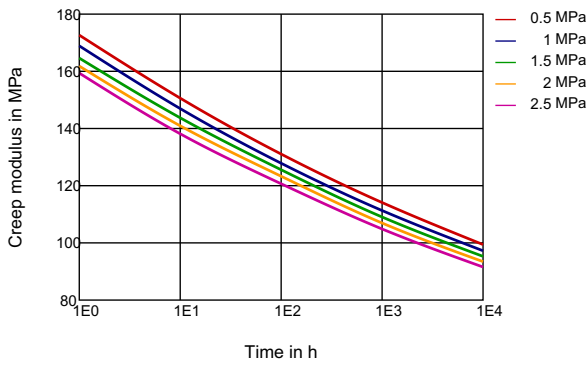
SECANT MODULUS-STRAIN



STRESS-STRAIN (ISOCHRONOUS) 104°F



CREEP MODULUS-TIME 104°F



Processing conditions:

- Typical melt temperature (Min / Recommended / Max) : 230°C / 250°C / 280°C.
- Drying time and temperature (only necessary for bags opened for more than two hours) : 4-8 hours at 80-90°C.

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PROCESSING Profile Extrusion, Other Extrusion	Headquarters: Arkema France 420 rue d'Estienne d'Orves 92705 Colombes Cedex France T +33 (0)1 49 00 80 80 hpp.arkema.com Arkema Inc. – High Performance Polymers 900 First Avenue King of Prussia, PA 19406 Tel.: +1 610 205 7000 hpp.arkema.com
DELIVERY FORM Pellets	
ADDITIVES Lubricants, Plasticizer	
SPECIAL CHARACTERISTICS Bio-Based, Heat Stabilized, Light Stabilized	
REGIONAL AVAILABILITY North America, Europe, Asia Pacific, South and Central America, Near East/Africa	

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