

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 (calculated) is >**93%**.

PROPERTIES	DRY / COND	UNIT	TEST STANDARD
RHEOLOGICAL PROPERTIES			
Melt Volume-Flow Rate	2 / *	cm³/10min	ISO 1133
Temperature	235 / *	°C	-
	455 / *	°F	
Load	5 / *	kg	-
	11 / *	lb	
MECHANICAL PROPERTIES			
Tensile Modulus	- / 510	MPa	ISO 527-1/-2
	- /	psi	
Yield stress	74000 - / 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	64 / *	-	ISO 868
Charpy Impact Strength, +23°C	- / No Break	kJ/m²	ISO 179/1eU
Charpy Impact Strength, -30°C	- / No Break	kJ/m²	ISO 179/1eU
Charpy Notched Impact Strength, +23°C	- / No Break	kJ/m²	ISO 179/1eA
Charpy Notched Impact Strength, -30°C	- / 11	kJ/m²	ISO 179/1eA
	- / 5.23	ftlb/in²	
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	

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Coeff. of Linear Thermal Expansion, parallel	100 / *	E-6/K	ISO 11359-1/-2
ELECTRICAL PROPERTIES			
Volume Resistivity	- / 1E10	Ohm*m	IEC 60093
Surface Resistivity	* / 2E12	Ohm	IEC 60093
Dielectric (Electric) Strength	- / 24	kV/mm	IEC 60243-1
	- / 610	kV/in	
OTHER PROPERTIES			
Water Absorption	1.8 / *	%	Sim. to ISO 62
Density	1040 / 1040	kg/m³	ISO 1183
	1.04 / 1.04	g/cm³	
%Bio-Based	93	-	ASTM D6866

MAIN APPLICATIONS:

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

PACKAGING:

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

SHELF LIFE:

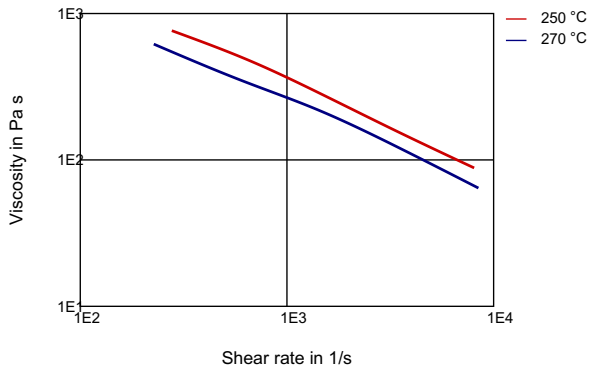
Two years from the delivery. For any use above this limit, please refer to our technical services.

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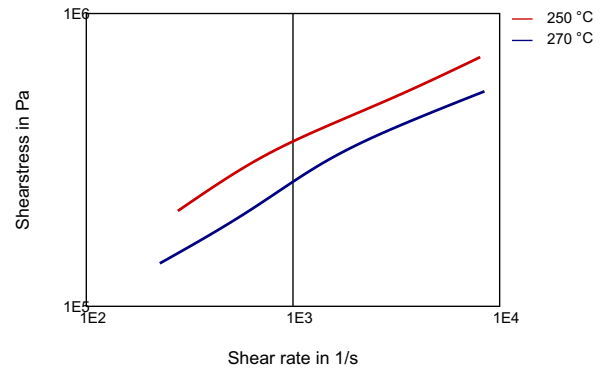
BESNO P20 TL

DIAGRAMS

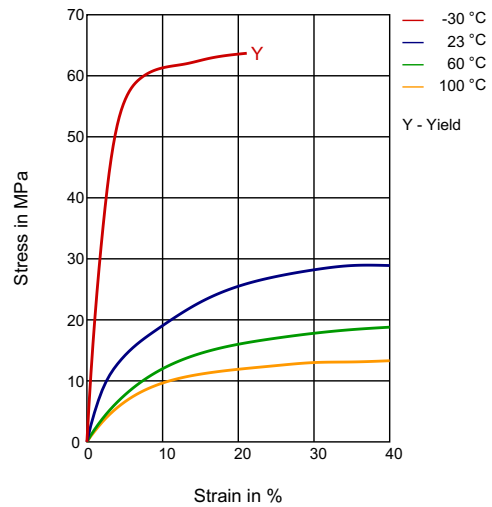
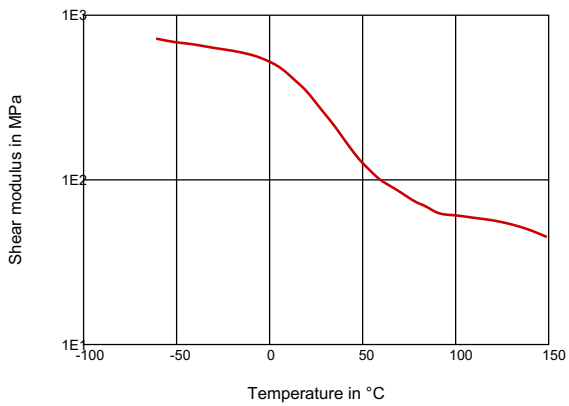
VISCOSITY-SHEAR RATE



SHEARSTRESS-SHEAR RATE

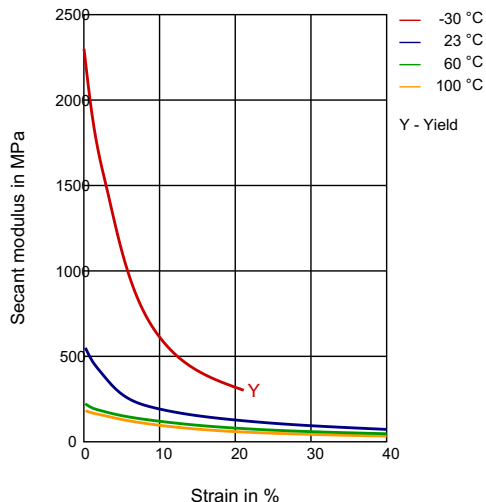


DYNAMIC SHEAR MODULUS-TEMPERATURE & STRESS-STRAIN

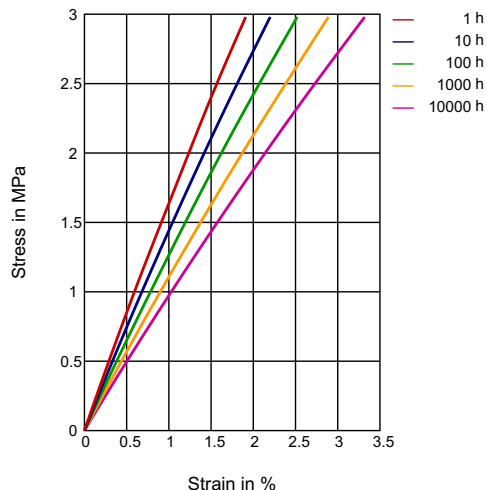


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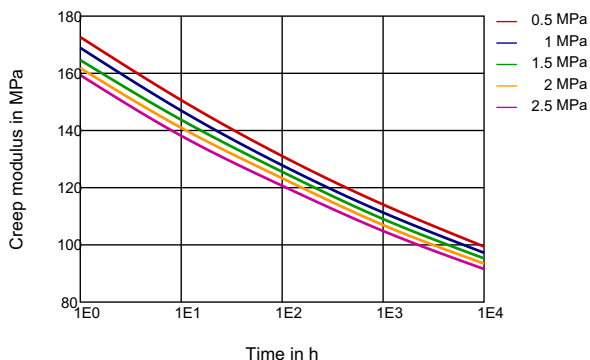
SECANT MODULUS-STRAIN



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	
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	