

RILSAN®

BZM 30 O TL

PA11, MHLR, 18-070, GF30

Rilsan® BZM 30 O TL is a fiberglass reinforced polyamide 11 produced from a renewable source. This natural grade is designed for injection molding.

The percentage of **renewable carbon is 98%** (calculated value, based on ASTM D6866).

PROPERTIES	DRY / COND	UNIT	TEST STANDARD
RHEOLOGICAL PROPERTIES			
Melt Volume-Flow Rate	9 / *	cm³/10min	ISO 1133
Temperature	235 / *	°C	-
	455 / *	°F	
Load	5 / *	kg	-
	11 / *	lb	
MECHANICAL PROPERTIES			
Tensile Modulus	- / 7300	MPa	ISO 527-1/-2
Stress at Break	- /	psi	ISO 527-1/-2
	1.06E6	MPa	
	- / 117	psi	
Strain at Break	17.000	%	ISO 527-1/-2
	- / 6		
Shore D Hardness	74 / *	-	ISO 868
Charpy Impact Strength, +23°C	- / 89	kJ/m²	ISO 179/1eU
	- / 42.3	ftlb/in²	
Charpy Impact Strength, -30°C	- / 96	kJ/m²	ISO 179/1eU
	- / 45.7	ftlb/in²	
Charpy Notched Impact Strength, +23°C	- / 24	kJ/m²	ISO 179/1eA
	- / 11.4	ftlb/in²	
Charpy Notched Impact Strength, -30°C	- / 17	kJ/m²	ISO 179/1eA
	- / 8.09	ftlb/in²	
THERMAL PROPERTIES			
Melting Temperature, 10°C/min	189 / *	°C	ISO 11357-1/-3
Temp. of Deflection Under Load, 1.80 MPa	175 / *	°C	ISO 75-1/-2
	347 / *	°F	
Temp. of Deflection Under Load, 0.45 MPa	180 / *	°C	ISO 75-1/-2
	356 / *	°F	
Vicat Softening Temperature, 50°C/h 50N	170 / *	°C	ISO 306
	338 / *	°F	

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Coeff. of Linear Thermal Expansion, parallel	50 / *	E-6/K	ISO 11359-1/-2
Burning Behav. at 1.5 mm Nominal Thickness	HB / *	class	IEC 60695-11-10
Thickness Tested	1.6 / *	mm	-
	0.0630 / *	in	
Burning Behav. at Thickness h	HB / *	class	IEC 60695-11-10
Thickness Tested	3.2 / *	mm	-
	0.1260 / *	in	
Oxygen Index	22 / *	%	ISO 4589-1/-2
ELECTRICAL PROPERTIES			
Relative Permittivity, 100Hz	4 / -	-	IEC 60250
Relative Permittivity, 1MHz	4 / -	-	IEC 60250
Dissipation Factor, 100Hz	578 / -	E-4	IEC 60250
Dissipation Factor, 1MHz	210 / -	E-4	IEC 60250
Volume Resistivity	- / 7E11	Ohm*m	IEC 60093
Surface Resistivity	* / 1E14	Ohm	IEC 60093
Dielectric (Electric) Strength	- / 45	kV/mm	IEC 60243-1
	- / 1140	kV/in	
Comparative Tracking Index	* / 600	-	IEC 60112
OTHER PROPERTIES			
Water Absorption	1.4 / *	%	Sim. to ISO 62
Humidity Absorption	0.5 / *	%	Sim. to ISO 62
Density	1250 / 1250	kg/m³	ISO 1183
	1.25 / 1.25	g/cm³	
%Bio-Based	98	-	ASTM D6866

MAIN APPLICATIONS:

- Quick connectors

PACKAGING:

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

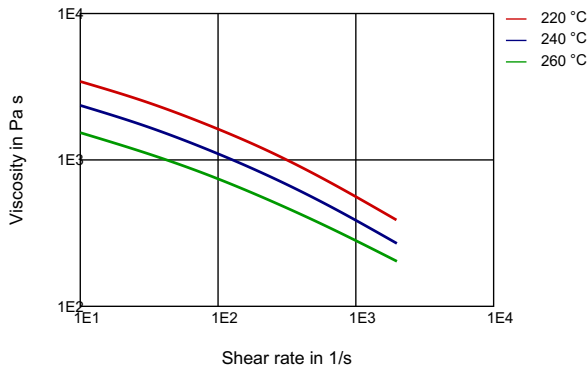
SHELF LIFE:

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

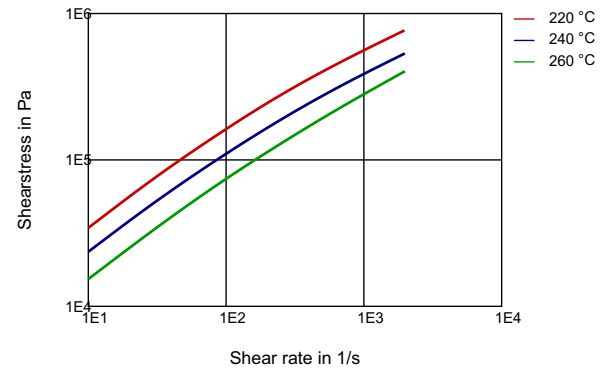
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DIAGRAMS

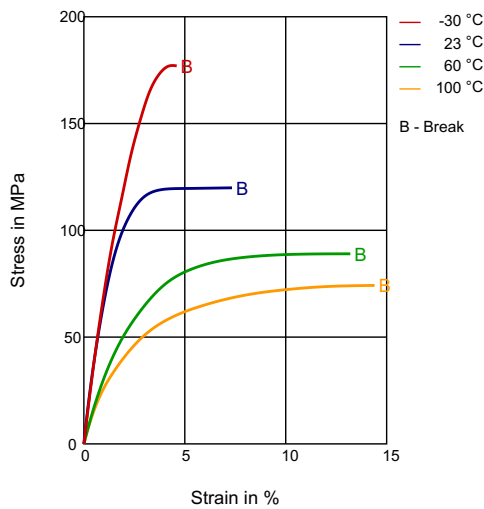
VISCOSITY-SHEAR RATE



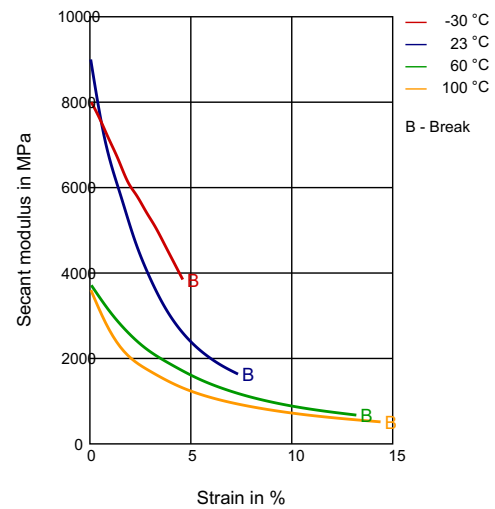
SHEARSTRESS-SHEAR RATE



STRESS-STRAIN

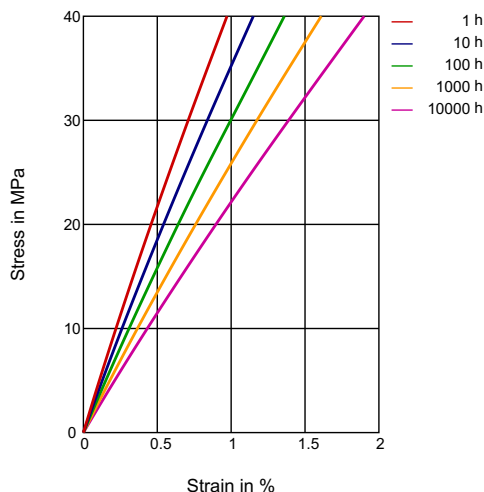


SECANT MODULUS-STRAIN

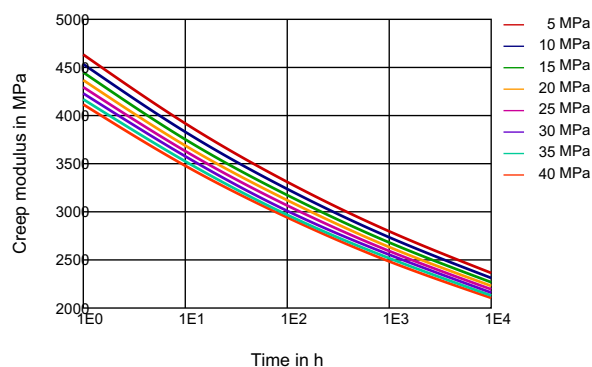


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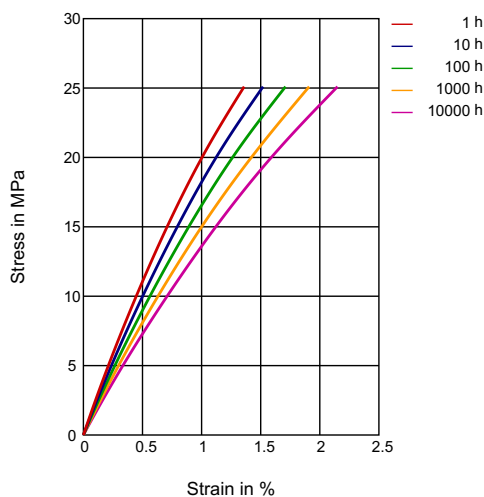
STRESS-STRAIN (ISOCHRONOUS) 73°F



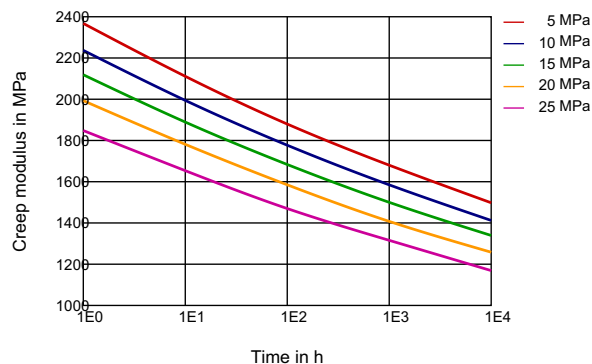
CREEP MODULUS-TIME 73°F



STRESS-STRAIN (ISOCHRONOUS) 176°F



CREEP MODULUS-TIME 176°F



Processing conditions:

- Typical melt temperature (Min / Recommended / Max) : 250°C / 270°C / 290°C.
- Mold temperature : 40 - 90°C
- Drying time and temperature (only necessary for bags opened for more than two hours) : 4-6 hours at 80-90°C.

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PROCESSING Injection Molding	
DELIVERY FORM Pellets	
ADDITIVES Release agent	
SPECIAL CHARACTERISTICS Bio-Based, Heat Stabilized, Light Stabilized	
REGIONAL AVAILABILITY North America, Europe, Asia Pacific, South and Central America, Near East/Africa	