

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.

According to ASTM D6866, the biobased carbon content is measured at 100%.

PROPERTIES	DRY / COND	UNIT	TEST STANDARD
RHEOLOGICAL PROPERTIES			
Melt Volume-Flow Rate	9 / *	cm ³ /10 min	ISO 1133
Temperature	235 / *	°C	-
	455 / *	°F	-
Load	5 / *	kg	-
	11 / *	lb	-
Molding Shrinkage, parallel	0.2 / *	%	ISO 294-4, 2577
Molding Shrinkage, normal	0.8 / *	%	ISO 294-4, 2577
MECHANICAL PROPERTIES			
Tensile Modulus	- / 7300	MPa	ISO 527-1/-2
	- / 1.06E6	psi	
Stress at Break	- / 117	MPa	ISO 527-1/-2
	- / 17000	psi	
Strain at Break	- / 6	%	ISO 527-1/-2
Shore D Hardness, after 15 s	74 / *	-	ISO 868
Charpy Impact Strength, +23°C	- / 89	kJ/m ²	ISO 179/1eU
	- / 42.3	ftlb/in ²	
Charpy Impact Strength, -30°C	- / 96	kJ/m ²	ISO 179/1eU
	- / 45.7	ftlb/in ²	
Charpy Notched Impact Strength, +23°C	- / 24	kJ/m ²	ISO 179/1eA
	- / 11.4	ftlb/in ²	
Charpy Notched Impact Strength, -30°C	- / 17	kJ/m ²	ISO 179/1eA
	- / 8.09	ftlb/in ²	
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	

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 20-02-2024

RILSAN®

BZM 30 O TL

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	
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 62631-3-1
Surface Resistivity	* / 1E14	Ohm	IEC 62631-3-2
Dielectric (Electric) Strength	- / 45	kV/mm	IEC 60243-1
	- / 1140	kV/in	
Comparative Tracking Index	* / 600	-	IEC 60112
OTHER PROPERTIES			
%Bio-Based	100	-	ASTM D6866
Water Absorption, 23°C, immersion, equilibrium	1.4 / *	%	ISO 62
Humidity Absorption, 23°C, RH50%, equilibrium	0.5 / *	%	ISO 62
Density	1250 / 1250	kg/m³	ISO 1183
	1.25 / 1.25	g/cm³	

MAIN APPLICATIONS:

- Quick connectors

PACKAGING:

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

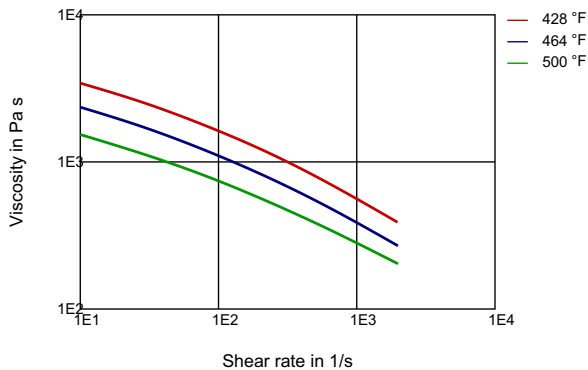
SHELF LIFE:

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

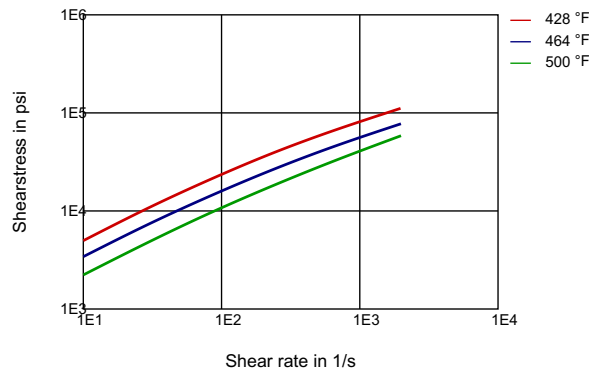
RILSAN® BZM 30 O TL

DIAGRAMS

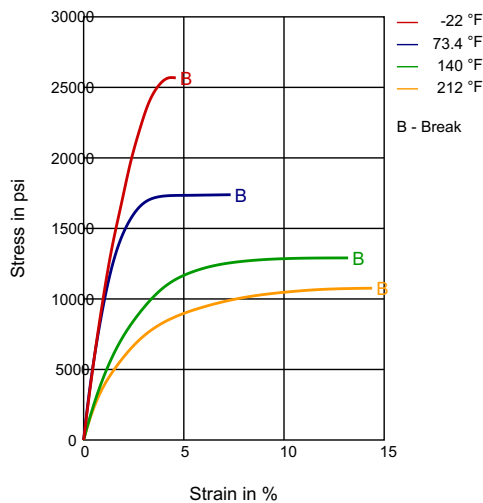
VISCOSITY-SHEAR RATE



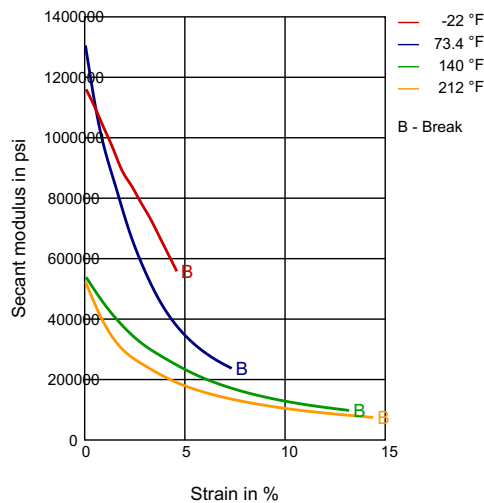
SHEARSTRESS-SHEAR RATE



STRESS-STRAIN

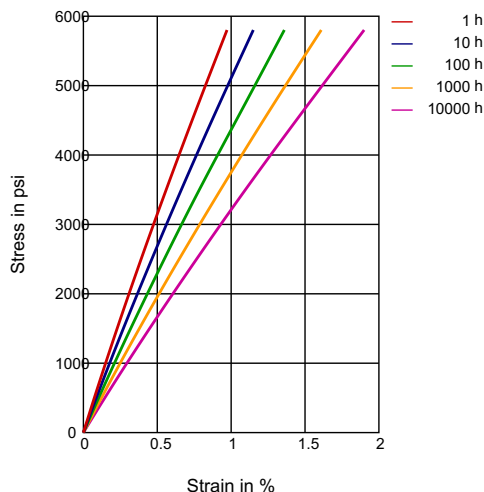


SECANT MODULUS-STRAIN

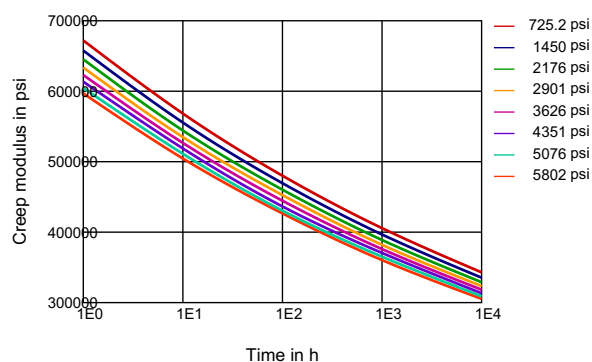


RILSAN® BZM 30 O TL

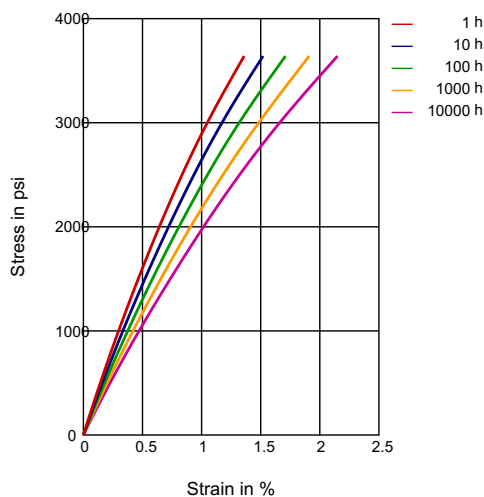
STRESS-STRAIN (ISOCHRONOUS) 73°F



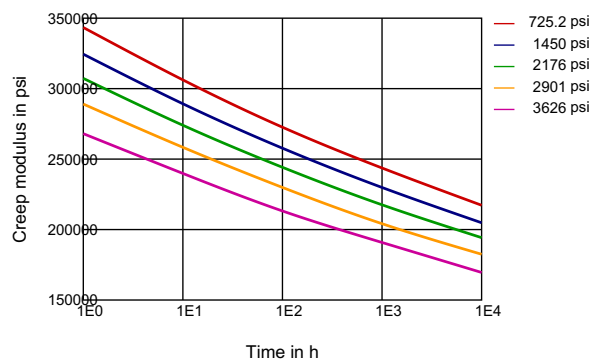
CREEP MODULUS-TIME 73°F



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.

RILSAN®

BZM 30 O TL

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

The statements, technical information and recommendations contained herein are believed to be accurate as of the date hereof. Since the conditions and methods of use of the product and of the information referred to herein are beyond our control, ARKEMA expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information; NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE GOODS DESCRIBED OR THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specific product designated and may not be applicable when such product is used in combination with other materials or in any process. The user should thoroughly test any application before commercialization. Nothing contained herein constitutes a license to practice under any patent and it should not be construed as an inducement to infringe any patent and the user is advised to take appropriate steps to be sure that any proposed use of the product will not result in patent infringement.