RILSAN®
HT CZM 30 BLACK TLD

PA11/10T,GF30,MHL,C16-090

Rilsan® HT CZM 30 BLACK TLD is a polyphthalamide produced from a renewable source. This grade is glass fiber-reinforced, formulated and designed for injection molding for high-temperature applications.

According to ASTM D6866, the biobased carbon content is measured at 68%.

PROPERTIES	DRY / COND	UNIT	TEST STANDARD
RHEOLOGICAL PROPERTIES			
Melt Volume-Flow Rate	15 / *	cm³/10 min	ISO 1133
Temperature	300 / *	°C	-
	572 / *	°F	
Load	2.16 / *	kg	-
	4.76 / *	lb	
Molding Shrinkage, parallel	0.3 / *	%	ISO 294-4, 2577
Molding Shrinkage, normal	1.0 / *	%	ISO 294-4, 2577
MECHANICAL PROPERTIES			
Tensile Modulus	8700 / -	MPa	ISO 527-1/-2
	1.26E6 / -	psi	
Stress at Break	151 / -	MPa	ISO 527-1/-2
	21900 / -	psi	
Strain at Break	2.6 / -	%	ISO 527-1/-2
Charpy Impact Strength, +23°C	57 / -	kJ/m²	ISO 179/1eU
	27.1 / -	ftlb/in²	
Charpy Impact Strength, -30°C	54 / -	kJ/m²	ISO 179/1eU
	25.7 / -	ftlb/in²	
Charpy Notched Impact Strength, +23°C	9.1 / -	kJ/m²	ISO 179/1eA
	4.33 / -	ftlb/in²	
Charpy Notched Impact Strength, -30°C	7.4 / -	kJ/m²	ISO 179/1eA
	3.52 / -	ftlb/in²	
THERMAL PROPERTIES			
Melting Temperature, 10°C/min	255 / *	°C	ISO 11357-1/-3
Temp. of Deflection Under Load, 1.80 MPa	220 / *	°C	ISO 75-1/-2
	428 / *	°F	
Temp. of Deflection Under Load, 0.45 MPa	240 / *	°C	ISO 75-1/-2
	464 / *	°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®
HT CZM 30 BLACK TLD

OTHER PROPERTIES			
%Bio-Based	68	-	ASTM D6866
Water Absorption, 23°C, immersion, equilibrium	1.13 / *	%	ISO 62
Humidity Absorption, 23°C, RH50%, equilibrium	0.22 / *	%	ISO 62
Density	1300 / 1300	kg/m³	ISO 1183
	1.3 / 1.3	g/cm³	

MAIN APPLICATIONS:

- Automotive & transportation quick connector for flexible fuels and powertrain applications
- High-temperature injection molding

PACKAGING:

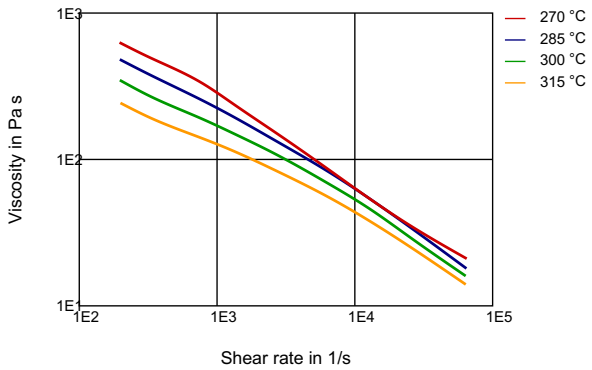
This grade is delivered dried in sealed packaging (25 kg bags) ready to be processed.

SHELF LIFE:

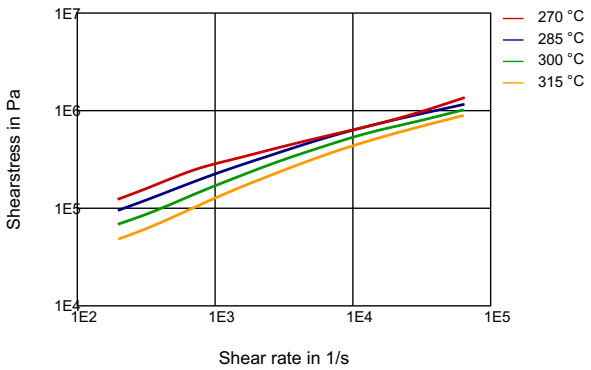
Two years from the delivery. For any use above this limit, please refer to our technical services.

DIAGRAMS

VISCOSITY-SHEAR RATE



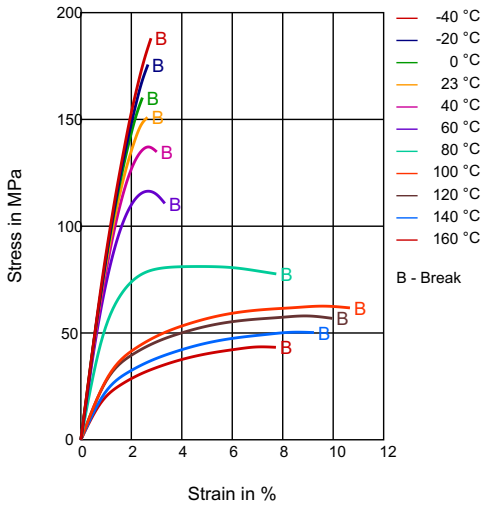
SHEARSTRESS-SHEAR RATE



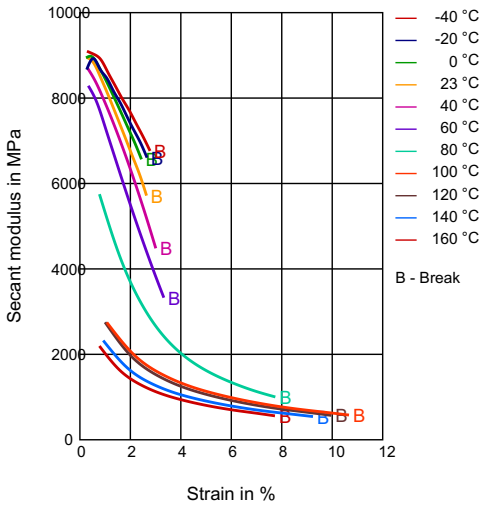
Arkema France - A French "société anonyme", registered in the Nanterre (France) Trade and Companies Register under the number 319 632 790 SDC/11-2018
Source: automatically generated TDS from Material Database on 20-02-2024

RILSAN®
HT CZM 30 BLACK TLD

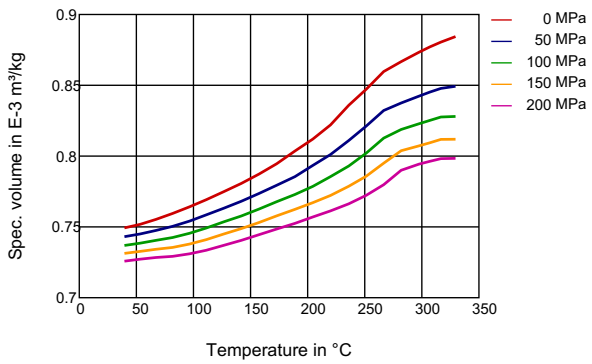
STRESS-STRAIN



SECANT MODULUS-STRAIN



SPECIFIC VOLUME-TEMPERATURE (PVT)



Injection molding process conditions :

- Typical melt temperature (Min / Recommanded / Maxi) : 270°C / 280°C / 320°C.
- Typical mold temperature : 90 - 110°C.
- Drying time and temperature (only for bags opened for more than two hours) : 4 - 8 hours / 100 - 110°C.

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®
HT CZM 30 BLACK TLD

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

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

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.

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