

RILSAN®

HT CESV BLACK P010 TL

PA11/10T-I,,EHL,C16-010

Rilsan® HT CESV BLACK P010 TL is a flexible polyphthalamide produced from a renewable source, typical used to replace metal in tubing for high-temperature automotive, transportation and other demanding technical applications.

According to ASTM D6866, the biobased carbon content is measured at 48%.

PROPERTIES	DRY / COND	UNIT	TEST STANDARD
RHEOLOGICAL PROPERTIES			
Melt Volume-Flow Rate	1.9 / *	cm ³ /10 min	ISO 1133
Temperature	300 / *	°C	-
	572 / *	°F	-
Load	5 / *	kg	-
	11 / *	lb	-
MECHANICAL PROPERTIES			
Tensile Modulus	- / 1015	MPa	ISO 527-1/-2
	- / 147000	psi	
Yield Stress	- / 30	MPa	ISO 527-1/-2
	- / 4350	psi	
Yield Strain	- / 5	%	ISO 527-1/-2
Nominal Strain at Break	- / >50	%	ISO 527-1/-2
Shore D Hardness, after 15 s	66 / *	-	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	- / 84	kJ/m ²	ISO 179/1eA
	- / 40	ftlb/in ²	
Charpy Notched Impact Strength, -30°C	- / 16	kJ/m ²	ISO 179/1eA
	- / 7.61	ftlb/in ²	
THERMAL PROPERTIES			
Melting Temperature, 10°C/min	260 / *	°C	ISO 11357-1/-3
Glass Transition Temperature, 10°C/min	82 / *	°C	ISO 11357-1/-2
	180 / *	°F	
Temp. of Deflection Under Load, 1.80 MPa	66 / *	°C	ISO 75-1/-2
	151 / *	°F	

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Source: automatically generated TDS from Material Database on 20-02-2024

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HT CESV BLACK P010 TL

Temp. of Deflection Under Load, 0.45 MPa

82 / *

°C

ISO 75-1/-2

180 / *

°F

OTHER PROPERTIES

%Bio-Based

48

-

ASTM D6866

Density

1050 / -

kg/m³

ISO 1183

1.05 / -

g/cm³

MAIN APPLICATIONS:

- Thermoplastic lines for automotive & transportation applications such as high temperature air/vacuum
- aggressive media and oil management systems
- cooling and selective catalyst reduction lines etc
- Hydraulic and pneumatic lines

PACKAGING:

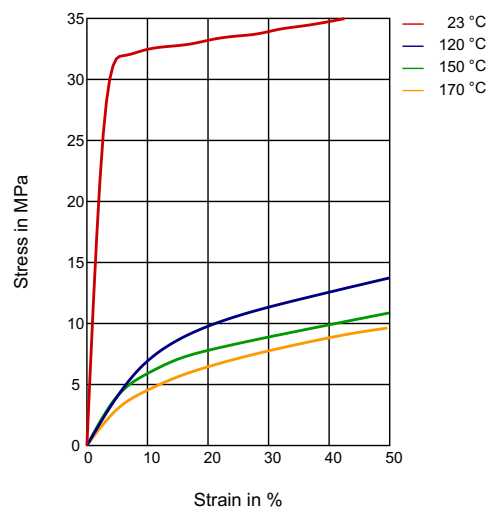
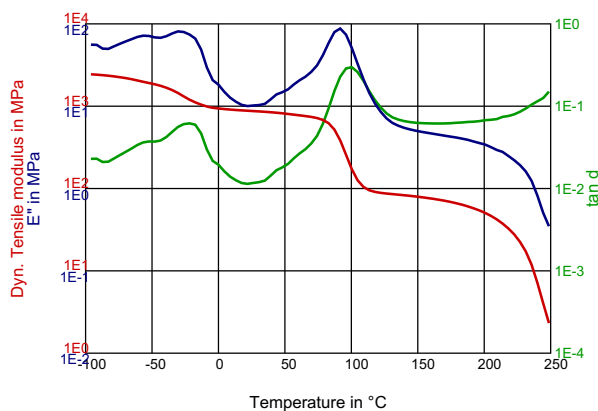
This grade is delivered dried in sealed packaging (25 kg bags) ready to be processed.

SHELF LIFE:

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

DIAGRAMS

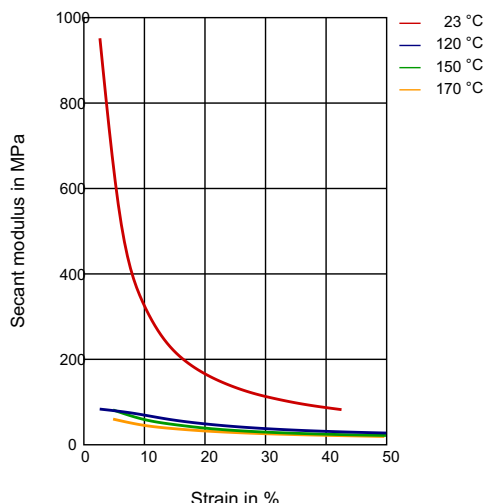
DYN. TENSILE MODULUS-TEMPERATURE STRESS-STRAIN



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SECANT MODULUS-STRAIN



Processing conditions :

- Typical melt temperature (Min / Recommended / Max) : 270°C / 280°C / 290°C.
- Drying time and temperature (only for bags opened for more than two hours) : 8 - 12 hours at 70 °C.

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
DELIVERY FORM Pellets	
SPECIAL CHARACTERISTICS Bio-Based, Heat Stabilized, Light Stabilized	Arkema Inc. – High Performance Polymers 900 First Avenue King of Prussia, PA 19406 Tel.: +1 610 205 7000 hpp.arkema.com
REGIONAL AVAILABILITY North America, Europe, Asia Pacific, South and Central America, Near East/Africa	

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