

Rilsan® BMN P40 D

Polyamide 11

Arkema

Message:

Rilsan® BMN P40 D is a Polyamide 11 (Nylon 11) product. It can be processed by injection molding and is available in Africa & Middle East, Asia Pacific, Europe, Latin America, or North America.

Characteristics include:

Eco-Friendly/Green

Plasticized

General Information				
Additive		Plasticizer		
Features		Renewable Resource Content		
Forms		Pellets		
Processing Method		Injection Molding		
Multi-Point Data		Creep Modulus vs. Time (ISO 11403-1)		
		Isochronous Stress vs. Strain (ISO 11403-1)		
		Isothermal Stress vs. Strain (ISO 11403-1)		
		Secant Modulus vs. Strain (ISO 11403-1)		
		Shear Modulus vs. Temperature (ISO 11403-1)		
		Viscosity vs. Shear Rate (ISO 11403-2)		
Physical	Dry	Conditioned	Unit	Test Method
Density	1050	1050	kg/m³	ISO 1183 ¹
Melt volume-flow rate (235°C/2.16 kg)	11.0	--	cm³/10min	ISO 1133 ²
Water Absorption (Saturation)	1.6	--	%	ISO 62 ³
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile modulus	405	350	MPa	ISO 527-2 ⁴
Tensile Stress (Yield)	27.0	25.0	MPa	ISO 527-2 ⁵
Tensile Strain (Yield)	42	42	%	ISO 527-2 ⁶
Nominal strain at break	> 50	> 50	%	ISO 527-2 ⁷
Impact	Dry	Conditioned	Unit	Test Method
Charpy notched impact strength				ISO 179/1eA ⁸
-30°C	--	6.00	kJ/m²	
23°C	--	No Break		
Charpy impact strength				ISO 179/1eU ⁹
-30°C	--	No Break		
23°C	--	No Break		
Thermal	Dry	Conditioned	Unit	Test Method

Deflection Temperature Under Load				ISO 75-2 ¹⁰
0.45 MPa	130	--	°C	
1.8 MPa	45.0	--	°C	
Vicat Softening Temperature (50°C/h, B (50N))	140	--	°C	ISO 306 ¹¹
Melting Temperature ¹²	182	--	°C	ISO 11357-3 ¹³
CLTE - Flow	1.1E-4	--	cm/cm/°C	ISO 11359-2 ¹⁴
Electrical	Dry	Conditioned	Unit	Test Method
Surface resistivity	--	5.0E+11	ohms	IEC 60093 ¹⁵
Volume resistivity	--	1.0E+9	ohms·m	IEC 60093 ¹⁶
Electric strength	--	23	kV/mm	IEC 60243-1 ¹⁷
Relative Permittivity				IEC 60250 ¹⁸
100 Hz	10.0	--		
1 MHz	4.00	--		
Dissipation Factor				IEC 60250 ¹⁹
100 Hz	0.18	--		
1 MHz	0.096	--		
Comparative tracking index	--	600		IEC 60112 ²⁰
Flammability	Dry	Conditioned	Unit	Test Method
Burning Behav. at 1.6mm nom. thickn. (1.60 mm)	HB	--		ISO 1210 ²¹
Burning Behav. at thickness h (3.20 mm)	HB	--		ISO 1210 ²²
Oxygen index	22	--	%	ISO 4589-2 ²³
NOTE				
1.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.			
2.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.			
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4.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.			
5.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.			
6.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.			
7.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.			

8.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.
9.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.
10.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.
11.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.
12.	10 °C/min
13.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.
14.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.
15.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.
16.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.
17.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.
18.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.
19.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.
20.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.
21.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.
22.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.
23.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.

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