

Rilsan® BZM 43 G9

Polyamide 11

Arkema

Message:

Rilsan®BZM 43 G9 is a polyamide 11 (nylon 11) product, which contains a 43% glass fiber reinforced material. It can be processed by injection molding and is available in North America, Africa and the Middle East, Latin America, Europe or Asia Pacific.

Features include:

environmental protection/green

Lubrication

mold release agent

General Information				
Filler / Reinforcement		Glass fiber reinforced material, 43% filler by weight		
Additive		Graphite powder lubricant demoulding		
Features		Updatable resources Lubrication		
Forms		Powder Particle		
Processing Method		Injection molding		
Physical	Dry	Conditioned	Unit	Test Method
Specific Gravity				
--	1.41	--	g/cm ³	ASTM D792
--	1420	1420	kg/m ³	ISO 1183 ¹
Melt volume-flow rate (235°C/2.16 kg)	2.00	--	cm ³ /10min	ISO 1133 ²
Water Absorption				
24 hr	0.10	--	%	ASTM D570
Saturation	0.50	--	%	ASTM D570
Saturation	1.1	--	%	ISO 62 ³
Hardness	Dry	Conditioned	Unit	Test Method
Rockwell Hardness (R-Scale)	111	--		ASTM D785
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	9000	8300	MPa	ISO 527-2 ⁴
Tensile Stress				
Fracture	146	143	MPa	ISO 527-2 ⁵
Limit, 23°C	117	--	MPa	ASTM D638
Tensile Elongation				

Fracture, 23°C	5.0	--	%	ASTM D638
Fracture	4.0	4.0	%	ISO 527-2 ⁶
Flexural Modulus (23°C)	8270	--	MPa	ASTM D790
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA ⁷
-30°C	10.0	10.0	kJ/m ²	ISO 179/1eA
23°C	12.0	12.0	kJ/m ²	ISO 179/1eA
Charpy impact strength				ISO 179/1eU ⁸
-30°C	75.0	73.0	kJ/m ²	ISO 179/1eU
23°C	67.0	74.0	kJ/m ²	ISO 179/1eU
Notched Izod Impact				ASTM D256
-40°C	80	--	J/m	ASTM D256
23°C	110	--	J/m	ASTM D256
80°C	200	--	J/m	ASTM D256
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				
0.45 MPa	180	--	°C	ISO 75-2 ⁹
1.8 MPa, not annealed	177	--	°C	ASTM D648
1.8 MPa	175	--	°C	ISO 75-2 ¹⁰
Vicat Softening Temperature (50°C/h, B (50N))	180	--	°C	ISO 306 ¹¹
Melting Temperature				
--	186	--	°C	
-- ¹²	189	--	°C	ISO 11357-3 ¹³
CLTE - Flow	3.0E-5	--	cm/cm/°C	ISO 11359-2 ¹⁴
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	--	8.0E+12	ohms	IEC 60093 ¹⁵
Volume Resistivity	--	4.0E+11	ohms·m	IEC 60093 ¹⁶
Electric strength	--	22	kV/mm	IEC 60243-1 ¹⁷
Comparative Tracking Index	--	275		IEC 60112 ¹⁸
Flammability	Dry	Conditioned	Unit	Test Method
Burning Behav. at 1.6mm nom. thickn. (1.60 mm)	HB	--		ISO 1210 ¹⁹
Burning Behav. at thickness h (3.20 mm)	HB	--		ISO 1210 ²⁰
Oxygen Index	22	--	%	ISO 4589-2 ²¹
Additional Information				
干燥				
Tensile Strength, Ultimate, ASTM D638, 176°F: 12,000 psiTensile Strength, Ultimate, ASTM D638, -40°F: 27,000 psiTensile Elongation, Ultimate, ASTM D638, 176°F: 10 %Tensile Elongation, Ultimate, ASTM D638, -40°F: 5 %Flexural Modulus, Tangent, ASTM D790, 176°F: 660,000 psiFlexural Modulus, Tangent, ASTM D790, -40°F: 1,400,000 psi				

NOTE	
1.	?????,?? ISO 10350 ??? 23°C/50%r.h. ???
2.	?????,?? ISO 10350 ??? 23°C/50%r.h. ???
3.	?????,?? ISO 10350 ??? 23°C/50%r.h. ???
4.	?????,?? ISO 10350 ??? 23°C/50%r.h. ???
5.	?????,?? ISO 10350 ??? 23°C/50%r.h. ???
6.	?????,?? ISO 10350 ??? 23°C/50%r.h. ???
7.	?????,?? ISO 10350 ??? 23°C/50%r.h. ???
8.	?????,?? ISO 10350 ??? 23°C/50%r.h. ???
9.	?????,?? ISO 10350 ??? 23°C/50%r.h. ???
10.	?????,?? ISO 10350 ??? 23°C/50%r.h. ???
11.	?????,?? ISO 10350 ??? 23°C/50%r.h. ???
12.	10 °C/min
13.	?????,?? ISO 10350 ??? 23°C/50%r.h. ???
14.	?????,?? ISO 10350 ??? 23°C/50%r.h. ???
15.	?????,?? ISO 10350 ??? 23°C/50%r.h. ???
16.	?????,?? ISO 10350 ??? 23°C/50%r.h. ???
17.	?????,?? ISO 10350 ??? 23°C/50%r.h. ???
18.	?????,?? ISO 10350 ??? 23°C/50%r.h. ???
19.	?????,?? ISO 10350 ??? 23°C/50%r.h. ???
20.	?????,?? ISO 10350 ??? 23°C/50%r.h. ???
21.	?????,?? ISO 10350 ??? 23°C/50%r.h. ???

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