## 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 22-11-2023

## **RILSAN FMNO**

PA11 Rilsan® FMNO is a natural Polyamide produced from a renewable source. It is unreinforced and designed for injection molding or melt spinning process.

The percentage of renewable carbon according to ASTM D 6866 is >98%.

PROPERTIES	DRY / COND	UNIT	TEST STANDARD
RHEOLOGICAL PROPERTIES			
Molding Shrinkage, parallel	1.1 / *	%	ISO 294-4, 2577
Molding Shrinkage, normal	1.1 / *	%	ISO 294-4, 2577
MECHANICAL PROPERTIES			
Tensile Modulus	1220 / 1200	MPa	ISO 527-1/-2
	177000 / 174000	psi	
Yield Stress	- / 39	MPa	ISO 527-1/-2
	- / 5660	psi	
Yield Strain	- / 5	%	ISO 527-1/-2
Stress at Break	54 / 54	MPa	ISO 527-1/-2
	7830 / 7830	psi	
Strain at Break	>50 / >50	%	ISO 527-1/-2
Shore D Hardness, after 15s	71 / *	-	ISO 868
Charpy Impact Strength, +23°C	No Break / No Break	kJ/m²	ISO 179/1eU
Charpy Impact Strength, -30°C	No Break / No Break	kJ/m²	ISO 179/1eU
Charpy Notched Impact Strength, +23°C	7 / 9	kJ/m²	ISO 179/1eA
	3.33 / 4.28	ftlb/in²	
Charpy Notched Impact Strength, -30°C	8 / 9	kJ/m²	ISO 179/1eA
	3.81 / 4.28	ftlb/in²	
THERMAL PROPERTIES			
Melting Temperature, 10°C/min	189 / *	°C	ISO 11357-1/-3
Temp. of Deflection Under Load, 1.80 MPa	42 / *	°C	ISO 75-1/-2
	108 / *	°F	
Temp. of Deflection Under Load, 0.45 MPa	129 / *	°C	ISO 75-1/-2
	264 / *	°F	
OTHER PROPERTIES			
Water Absorption, 23°C, immersion, equilibrium	1.8 / *	%	ISO 62
Humidity Absorption, 23°C, RH50%, equilibrium	0.81 / *	%	ISO 62
Density	1030 / -	kg/m³	ISO 1183
	1.03 / -	g/cm³	



PROCESSING	Headquarters:	
Injection Molding, Melt Spinning	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	
DELIVERY FORM		
Pellets		
SPECIAL CHARACTERISTICS		
Bio-Based	Polymers 900 First Avenue	
REGIONAL AVAILABILITY	King of Prussia, PA 19406 Tel.: +1 610 205 7000 hpp.arkema.com	
North America, Europe, Asia Pacific, South and Central America, Near East/Africa		

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