

Arkema Group Rilsan® AMN P20 TLD Nylon 12, Flexible, Injection Grade (Dry)

Categories: [Polymer](#); [Thermoplastic](#); [Nylon](#); [Nylon 12](#)

Material Notes: Designation ISO 1874-PA12-P,MHLR,14-005

Flexible grade for injection molding. Available colors: black and natural. Light and heat stabilized. Mold-release agent.

Good impact strength. Flexibility and dynamic properties. Easy filling of the mold due to its well adapted viscosity. Low shrinkage: include 1% on average for the design of the mold. Good dimensional stability (low moisture absorption).


Example applications: Flexible parts with high impact strength and vibration resistance.


ISO data provided by the manufacturer, Arkema.

Key Words: PA12; Polyamide 12

Vendors: No vendors are listed for this material. Please [click here](#) if you are a supplier and would like information on how to add your listing to this material.

Physical Properties	Metric	English	Comments
Density	1.02 g/cc	0.0368 lb/in ³	
Water Absorption	1.4 %	1.4 %	
Melt Flow	42 g/10 min @Load 2.16 kg, Temperature 235 °C	42 g/10 min @Load 4.76 lb, Temperature 455 °F	

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	31.0 MPa	4500 psi	50 mm/min
Elongation at Break	>= 50 %	>= 50 %	Nominal Strain; 50 mm/min
Elongation at Yield	20 %	20 %	50 mm/min
Tensile Modulus	0.620 GPa	89.9 ksi	1 mm/min
Charpy Impact Unnotched	NB	NB	
Charpy Impact, Notched	NB	NB	Low Temp
	0.880 J/cm ²	4.19 ft-lb/in ²	
	0.380 J/cm ² @Temperature -30.0 °C	1.81 ft-lb/in ² @Temperature -22.0 °F	

Electrical Properties	Metric	English	Comments
Dissipation Factor 	0.000364 @Frequency 1e+6 Hz	0.000364 @Frequency 1e+6 Hz	
	0.000742 @Frequency 100 Hz	0.000742 @Frequency 100 Hz	

Thermal Properties	Metric	English	Comments
Melting Point	174 °C	345 °F	10°C/min
Flammability, UL94 	HB @Thickness 1.60 mm	HB @Thickness 0.0630 in	
	HB @Thickness 3.10 mm	HB @Thickness 0.122 in	

Some of the values displayed above may have been converted from their original units and/or rounded in order to display the information in a consistent format. Users requiring more precise data for scientific or engineering calculations can click on the property value to see the original value as well as raw conversions to equivalent units. We advise that you only use the original value or one of its raw conversions in your calculations to minimize rounding error. We also ask that you refer to MatWeb's [terms of use](#) regarding this information. [Click here](#) to view all the property values for this datasheet as they were originally entered into MatWeb.