

Celanese Nilit FRIANYL A63 KV30 Nylon 6.6 for injection molding, 30% glass ball reinforced

Categories: [Polymer](#); [Thermoplastic](#); [Nylon \(Polyamide PA\)](#); [Nylon 66 \(PA66\)](#)

Material Notes: Nylon 6.6 for injection molding.

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	1.35 g/cc	0.0488 lb/in ³	ISO 1183
Water Absorption	1.5 - 2.5 %	1.5 - 2.5 %	ISO 62
Water Absorption at Saturation	6.0 - 8.0 %	6.0 - 8.0 %	ISO 62
Viscosity Measurement	145	145	Viscosity index; ISO 307
Linear Mold Shrinkage	0.010 - 0.019 cm/cm	0.010 - 0.019 in/in	FRISSETTA Test Method

Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	175 MPa	25400 psi	ISO 2039-1
Tensile Strength at Break	90.0 MPa	13100 psi	ISO 527
Elongation at Break	5.0 %	5.0 %	ISO 527
Tensile Modulus	4.50 GPa	653 ksi	ISO 527
Flexural Strength	125 MPa	18100 psi	ISO 178
Flexural Modulus	4.30 GPa	624 ksi	ISO 178
Charpy Impact Unnotched	2.00 J/cm ²	9.52 ft-lb/in ²	DIN 53453
	3.00 J/cm ²	14.3 ft-lb/in ²	ISO 179/1eU
	1.80 J/cm ²	8.57 ft-lb/in ²	DIN 53453
	@Temperature -40.0 °C	@Temperature -40.0 °F	
Charpy Impact, Notched	0.400 J/cm ²	1.90 ft-lb/in ²	ISO 179/1eA
	0.400 J/cm ²	1.90 ft-lb/in ²	DIN 53453

Electrical Properties	Metric	English	Comments
Dissipation Factor	0.020	0.020	IEC 250
	@Frequency 1e+6 Hz	@Frequency 1e+6 Hz	
Comparative Tracking Index	550 V	550 V	CTI 100; IEC 112

Thermal Properties	Metric	English	Comments
Melting Point	256 °C	493 °F	ISO 3146 DSC
Maximum Service Temperature, Air	110 °C	230 °F	Continuous; FRISSETTA Test Method
Deflection Temperature at 0.46 MPa (66 psi)	220 °C	428 °F	ISO 75
Deflection Temperature at 1.8 MPa (264 psi)	200 °C	392 °F	ISO 75

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.