

Properties (dry)		Value	Units	Method
Viscosity	RV in formic acid, nominal	48	—	ASTM D789
	VN at 0.5% in sulfuric acid, nominal	150	mL/g	ISO 307
	RV at 1% in sulfuric acid, nominal	2.7	—	—
Physical	Density	1.14	g/cm ³	ISO 1183
	Mold Shrinkage, 2.0 mm, Parallel	1.3	%	ISO 294-4
	Mold Shrinkage, 2.0 mm, Transverse	1.7	%	ISO 294-4
	Water Absorption - 24 hours	1.8	%	ISO 62
	Water Absorption - Equilibrium @ 50% RH	2.6	%	ISO 62
Mechanical	Tensile Strength at Yield	84	MPa	ISO 527
	Elongation at Yield	4.5	%	ISO 527
	Elongation at Break	50	%	ISO 527
	Tensile Modulus	2900	MPa	ISO 527
	Flexural Modulus	3000	MPa	ISO 178
	Flexural Strength	98	MPa	ISO 178
	Notched Charpy at 23°C	4.7	kJ/m ²	ISO 179
	Notched Charpy at -30°C	4.6	kJ/m ²	ISO 179
	Unnotched Charpy at 23°C	NB	kJ/m ²	ISO 179
	Unnotched Charpy at -30°C	NB	kJ/m ²	ISO 179
	Notched Izod at 23°C	5.0	kJ/m ²	ISO 180
Thermal	Melting Temperature, 10°C/min	263	°C	ISO 11357
	HDT at 0.45 MPa	205	°C	ISO 75
	HDT at 1.80 MPa	73	°C	ISO 75

Product Description

INVISTA U4803 NC01 is a general purpose, natural PA66 resin suitable for compounding, injection molding, and extrusion applications where ease of processing, good color and physical property retention are desired.

General Information
Material Status

Commercial: Active

Availability

North America, South America, Europe, Asia

Features

Standard viscosity, good whiteness

RoHS

No intentional additives or ingredients used in U4803 are among those in the European directive 2011/65/EC (RoHS), as amended.

Process Guidelines for Molding

Drying Temperature	80 °C
Drying Time*	8 - 12 hours
Barrel Temperatures	
Rear	250 - 270 °C
Middle	270 - 290 °C
Front	270 - 290 °C
Nozzle	270 - 290 °C
Processing Temperature (melt)	280 - 295 °C
Mold Temperature	50 - 90 °C
Back Pressure**	2 - 10 bar
Vent Depth	0.007 - 0.04 mm
Cushion (range)	4 - 6 mm
Suggested Moisture (max)	0.20 wt%
Suggested Moisture (min)	0.10 wt%
Screw Speed	75 - 180 rpm

* Initial moisture below 0.5 wt%. Use dehumidified air.

** Melt pressure

INVISTA Nylon Polymer

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