

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	1.5	%	ISO 294-4
	Mold Shrinkage, 2.0 mm, Transverse	1.8	%	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	82	MPa	ISO 527
	Elongation at Yield	4.2	%	ISO 527
	Elongation at Break	40	%	ISO 527
	Tensile Modulus	3100	MPa	ISO 527
	Flexural Modulus	2900	MPa	ISO 178
	Flexural Strength	94	MPa	ISO 178
	Notched Charpy at 23°C	5.4	kJ/m ²	ISO 179
	Notched Charpy at -30°C	4.2	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	4.7	kJ/m ²	ISO 180
Thermal	Melting Temperature, 10°C/min	261	°C	ISO 11357
	HDT at 0.45 MPa	200	°C	ISO 75
	HDT at 1.80 MPa	72	°C	ISO 75
	CLTE, 2.0 mm, Parallel, 23 - 55 °C	0.9	10 ⁻⁴ /°C	ISO 11359
	CLTE, 2.0 mm, Transverse, 23 - 55 °C	1.1	10 ⁻⁴ /°C	ISO 11359
Electrical	Surface Resistivity	2E+14	ohms	IEC 60093
	Volume Resistivity, 2.0 mm	4E+14	ohm-cm	IEC 60093
	Dielectric Strength, 1.0 mm	32	kV/mm	IEC 60243
Flammability	Flammability Classification at 0.71 mm	V-2	---	UL 94
	Flammability Classification at 1.5 mm	V-2	---	UL 94
	Flammability Classification at 3.0 mm	V-2	---	UL 94
	Glow-Wire Flammability at 0.71 mm	960	°C	IEC 60695
	Glow-Wire Flammability at 1.5 mm	960	°C	IEC 60695
Glow-Wire Flammability at 3.0 mm	960	°C	IEC 60695	

Product Description

INVISTA U4800 NC01 is a general purpose, natural PA66 resin suitable for compounding, injection molding, and extrusion applications where ease of processing, excellent color, and physical property retention are desired.

General Information

Material Status

Commercial: Active

Availability

North America, South America, Europe, Asia

Features

Low moisture, excellent whiteness

RoHS

No intentional additives or ingredients used in U4800 are among those in the European directive 2011/65/EC (RoHS), as amended.

Process Guidelines for Molding

Drying Temperature	80 °C
Drying Time*	3 - 4 hours
Barrel Temperatures	
Rear	250 - 280 °C
Middle	275 - 290 °C
Front	275 - 290 °C
Nozzle	275 - 295 °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 0.25 wt%. Use dehumidified air.

** Melt pressure

INVISTA Nylon Polymer

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Product Data Sheet Disclaimer

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