

Properties (dry)		Value	Units	Method
Viscosity	VN at 0.5% in formic acid, nominal	295	mL/g	ISO 307
	VN at 0.5% in sulfuric acid, nominal	300	mL/g	ISO 307
	RV at 1% in sulfuric acid, nominal	4.6	---	---
	RV in formic acid, nominal	240	---	ASTM D789
Physical	Density	1.14	g/cm ³	ISO 1183
	Mold Shrinkage, 2.0 mm, Parallel	1.7	%	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	2.7	%	ISO 62
Mechanical	Tensile Strength at Yield	89	MPa	ISO 527
	Elongation at Yield	4.4	%	ISO 527
	Elongation at Break	25	%	ISO 527
	Tensile Modulus	2950	MPa	ISO 527
	Flexural Modulus	2900	MPa	ISO 178
	Flexural Strength	97	MPa	ISO 178
	Notched Charpy at 23°C	5.6	kJ/m ²	ISO 179
	Notched Charpy at -30°C	6.1	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	4.4	kJ/m ²	ISO 180
Thermal	Melting Temperature, 10°C/min	262	°C	ISO 11357
	HDT at 0.45 MPa	176	°C	ISO 75
	HDT at 1.80 MPa	63	°C	ISO 75
Flammability	Flammability Classification at 0.40 mm	HB	---	UL 94
	Flammability Classification at 0.71 mm	HB	---	UL 94
	Flammability Classification at 1.5 mm	HB	---	UL 94
	Flammability Classification at 3.0 mm	HB	---	UL 94

Product Description

INVISTA HV240AHSL is a high viscosity PA66 resin for extrusion and injection molding applications. It is heat stabilized and lubricated.

General Information

Material Status

Commercial: Active

Availability

North America, South America, Europe, Asia

Features

High viscosity, heat stabilized, lubricated for injection molding, fast and consistent crystallization

RoHS

No intentional additives or ingredients used in HV240AHSL are among those in the European directive 2011/65/EC (RoHS), as amended.

Process Guidelines for Molding

Drying Temperature	90 °C
Drying Time*	4 - 6 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)	0.03 wt%
Suggested Moisture (min)	0.01 wt%
Screw Speed	75 - 180 rpm

* Initial moisture below 0.10 wt%. Use dehumidified air.

** Melt pressure

INVISTA Nylon Polymer

Additional Information: NISP@INVISTA.com

Website: NylonPolymer.INVISTA.com

Issue Date: January 2019

Product Data Sheet Disclaimer

This Product Data Sheet relates only to the identified product and any identified uses. It is based on information available as of January 2018. Additional information may be needed to evaluate other uses of the product, including use of the product in combination with any materials or in any processes other than those specifically referenced. THIS PRODUCT DATA SHEET DOES NOT CONTAIN A COMPLETE STATEMENT OF, AND DOES NOT CONSTITUTE A REPRESENTATION, WARRANTY OR GUARANTY WITH REGARD TO, A PRODUCT'S CHARACTERISTICS, USES, QUALITY, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR THE SUITABILITY, SAFETY, EFFICACY, HAZARDS OR HEALTH EFFECTS OF THE PRODUCT, WHETHER USED SINGULARLY OR IN COMBINATION WITH ANY OTHER PRODUCT, EXCEPT TO THE EXTENT REQUIRED BY THE RELEVANT LAW AND REGULATIONS. Nothing contained in this Product Data Sheet shall be construed to modify any of the terms under which the product was sold by INVISTA.