

# INVISTA HV360AHS�

## PA66 Resin

### Product Description

INVISTA HV360AHS� is a high viscosity PA66 resin for extrusion and injection molding applications. It is heat stabilized and lubricated.

	Properties (dry)	Value	Units	Method
Viscosity	RV in formic acid, nominal	360	–	ASTM D789
	VN at 0.5% in formic acid, nominal	340	mL/g	ISO 307
	VN at 0.5% in sulfuric acid, nominal	340	mL/g	ISO 307
	RV at 1% in sulfuric acid, nominal	5.2	–	Modified ISO 307
Physical	Density	1.14	g/cm <sup>3</sup>	ISO 1183
	Mold shrinkage, 2.0 mm, parallel	2.0	%	ISO 294-4
	Mold shrinkage, 2.0 mm, transverse	1.9	%	ISO 294-4
	Water absorption - 24 hours	1.6	%	ISO 62
	Water absorption - equilibrium @ 50% RH	2.7	%	ISO 62
Mechanical	Tensile strength at yield	88	MPa	ISO 527
	Elongation at yield	4.4	%	ISO 527
	Elongation at break	25	%	ISO 527
	Tensile modulus	3000	MPa	ISO 527
	Flexural modulus	2950	MPa	ISO 178
	Flexural strength	102	MPa	ISO 178
	Notched Charpy at 23°C	5.5	kJ/m <sup>2</sup>	ISO 179
	Notched Charpy at -30°C	6.6	kJ/m <sup>2</sup>	ISO 179
	Unnotched Charpy at 23°C	NB	kJ/m <sup>2</sup>	ISO 179
	Unnotched Charpy at -30°C	NB	kJ/m <sup>2</sup>	ISO 179
Thermal	Notched Izod at 23°C	4.9	kJ/m <sup>2</sup>	ISO 180
	Melting temperature, 10°C/min	262	°C	ISO 11357
	HDT at 0.45 MPa	183	°C	ISO 75
	HDT at 1.80 MPa	61	°C	ISO 75

	Properties (dry)	Value	Units	Method
Flammability	Flame Rating at 0.40 mm	HB	–	UL 94
	Flame Rating at 0.71 mm	HB	–	UL 94
	Flame Rating at 1.5 mm	HB	–	UL 94
	Flame Rating at 3.0 mm	HB	–	UL 94

## General Information

### Material Status

Commercial: Active

### Availability

- North America
- South America
- Europe
- Asia

### Features

- Very high viscosity
- Heat stabilized
- Lubricated for injection molding
- Fast and consistent crystallization

### RoHS

No intentional additives or ingredients used in HV360AHSL are among those in European directive 2011/65/EC (RoHS), as amended.

Process Guidelines for Molding	
Drying temperature	90°C
Drying time*	6 - 8 hrs
Barrel temperatures	
Rear	270 - 285°C
Middle	275 - 285°C
Front	275 - 285°C
Nozzle	275 - 295°C
Processing temperature (melt)	280 - 290°C
Mold temperature	50 - 90°C
Back pressure**	5 - 30 bar
Vent depth	0.007 - 0.04 mm
Cushion (range)	4 - 6 mm
Suggested moisture (max)	0.02 wt%
Suggested moisture (min)	No lower limit
Screw Speed	50 - 120 rpm

\* Initial moisture below 0.08 wt%. Use dehumidified air.

\*\* Melt pressure

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