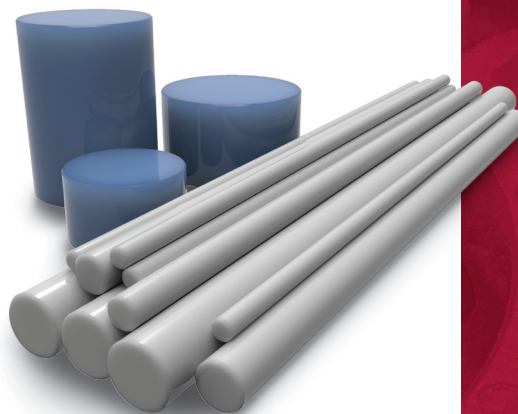


HIGH VISCOSITY. HIGHLY DURABLE.



High Viscosity PA66 Resins

INVISTA introduces a new line of premium PA66 resins. These high viscosity resins combine wear resistance with durability, and have good retention of molecular weight during processing, creating exceptional results in challenging specialty applications. Injection molders, extruders and compounders now have access to tough, durable resins that are resistant to many solvents, oils and chemicals.

Benefits Include:

- Stable melt viscosity to allow wide processing window
- Excellent wear resistance
- Toughness



Specialty Applications:

MONOFILAMENT

- Brushes/bristles
- Fishing line
- Trimmer line

FILMS

- High-strength multilayer films
- Cast films

EXTRUSION

- Stock shapes, rods, profiles
- Wire coatings
- Tubing
- Sheet

INJECTION MOLDING

- Friction/wear components
- Gears
- Chain tensioners
- Rail isolators

COMPOUNDING FEEDSTOCK

INVISTA NYLON POLYMER

The latest development by INVISTA Nylon Polymer—a division of INVISTA—the world's largest integrated producer of PA66 polymer and intermediates. Together, INVISTA and INVISTA Nylon Polymer provide flexible solutions in all aspects, from technical support during product validation to new application development. The TORZEN® product portfolio provides quality products for a broad range of sectors, including automotive, electronics/electrical, industrial and consumer.

INVISTA High Viscosity PA66 resins are available for sampling and qualification.
Contact us today at NISP@INVISTA.com or visit nylonpolymer.invista.com.

Summary of physical, mechanical, thermal properties

Properties		Unit	Method	HV80A NC01	HV125A NC01	HV125AHSL NC01	HV240A NC01	HV240AHSL NC01	HV360A NC01	HV360AHSL NC01
Viscosity	RV in formic acid, nominal	–	ASTM D789	80	125	125	240	240	360	360
	VN at 0.5% in sulfuric acid, nominal	mL/g	ISO 307	190	230	230	290	290	330	330
	RV at 1% in sulfuric acid, nominal	–	–	3.2	3.7	3.7	4.6	4.6	5.3	5.3
Physical	Density	g/cm ³	ISO 1183	1.14	1.13	1.13	1.14	1.14	1.14	1.14
	Mold shrinkage, 2.0 mm, Parallel	%	ISO 294-4	1.4	1.7	2.1	1.9	1.7	2.0	2.0
	Mold shrinkage, 2.0 mm, Transverse	%	ISO 294-4	1.5	1.7	2.0	1.7	1.8	1.9	1.9
	Water absorption – 24 hours	%	ISO 62	–	1.8	–	1.8	2.0	2.1	2.1
Mechanical	Tensile strength at yield	MPa	ISO 527	85	80	84	79	84	82	84
	Elongation at yield	%	ISO 527	4.2	4.3	4.3	4.0	4.2	4.2	4.1
	Elongation at break	%	ISO 527	45	50	30	30	35	30	25
	Tensile modulus	MPa	ISO 527	2950	3100	3000	2700	3200	3000	3050
	Flexural modulus	MPa	ISO 178	2800	2900	2900	3000	3200	2900	2900
	Flexural strength	MPa	ISO 178	90	93	95	96	102	95	96
	Notched Charpy at 23°C	kJ/m ²	ISO 179	4.5	5.2	4.8	4.5	4.4	5.2	5.6
	Notched Charpy at -30°C	kJ/m ²	ISO 179	2.2	2.3	2.5	4.0	5.2	6.5	5.0
	Unnotched Charpy at 23°C	kJ/m ²	ISO 179	Non-break	Non-break	Non-break	Non-break	Non-break	Non-break	Non-break
	Unnotched Charpy at -30°C	kJ/m ²	ISO 179	100	Non-break	102	Non-break	Non-break	Non-break	Non-break
	Notched Izod at 23°C	kJ/m ²	ISO 180	5.0	4.5	5.1	5.0	5.3	5.8	5.0
Thermal	Melting temperature, 10°C/min	°C	ISO 11357	262	263	263	262	262	261	261
	HDT at 0.45 MPa	°C	ISO 75	–	202	–	212	209	191	186
	HDT at 1.82 MPa	°C	ISO 75	–	68	–	72	69	63	63
	UL Yellow Card	–	–	√	√	–	√	–	–	–

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