

CONSISTENT QUALITY. GLOBAL SUPPLY.

INVISTA's compounding feedstock PA66 resins feature consistent quality while delivering the toughness, chemical resistance and long-term heat resistance for which PA66 is known. With local supply of most products in North America, Europe and Asia, these resins are an ideal solution for compounders in all regions. The portfolio includes quality products for a broad range of markets, including automotive, electrical/electronics, industrial and consumer.

Low Viscosity Resins

ADVANTAGES

- High flow
- Allows high loading of fillers
- Beneficial for shear-sensitive additives

INVISTA PRODUCTS

- HyperFlow™ U2501 PA66
- U2503 PA66
- U3501 PA66
- U3600 PA66
- U3602 PA66
- U4200 PA66
- U4201 PA66

Medium Viscosity Resins

ADVANTAGES

- General purpose
- Good flow
- Balanced molecular weight

INVISTA PRODUCTS

- U4500 PA66
- U4503 PA66
- U4800 PA66
- U4801 PA66
- U4803 PA66
- U5000 PA66
- U5101 PA66

High Viscosity Resins

ADVANTAGES

- High molecular weight
- High melt strength
- Durability

INVISTA PRODUCTS

- HV80A PA66
- HV125A PA66
- HV240A PA66
- HV360A PA66

High Amine Ends Resin

ADVANTAGES

- Very high amine end groups
- Improved hydrolysis resistance

INVISTA PRODUCTS

- U4591 PA66

Summary of Properties and UL Certifications

INVISTA PA66 Feedstock Products																						
	Property	Unit	Method	HyperFlow™ U2501	U2503	U3501	U3600	U3602	U4200	U4201	U4500	U4503	U4591	U4800	U4801	U4803	U5000	U5101	HV80A	HV125A	HV240A	HV360A
Physical	RV in formic acid, nominal	—	ASTM D789	25	25	35	36	36	42	42	45	45	45	48	48	48	50	51	80	125	240	360
	RV at 1% in sulfuric acid, nominal	—	—	2.1	2.1	2.4	2.4	2.4	2.55	2.55	2.65	2.6	2.65	2.7	2.7	2.7	2.75	2.8	3.2	3.7	4.6	5.2
	VN in sulfuric acid, nominal	mL/g	ISO 307	100	100	126	129	128	138	138	145	145	145	150	150	150	153	155	190	235	300	340
	Amine end groups, nominal	mequiv/kg	—	55	55	56	56	44	50	50	53	50	88	50	50	50	48	50	—	—	—	—
	Moisture maximum, as packaged	wt%	ISO 15512	0.50	0.60	0.50	0.35	0.25	0.25	0.50	0.25	0.50	0.45	0.20	0.50	0.50	0.20	0.40	0.08	0.06	0.06	0.05
Mechanical	Density	g/cm³	ISO 1183	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
	Tensile strength at yield	MPa	ISO 527	82	82	82	82	82	80	82	83	85	81	82	82	84	84	80	84	86	84	85
	Elongation at yield	%	ISO 527	4.5	4.5	3.9	4.4	4.4	4.6	4.4	4.1	4.3	4.3	4.2	4.4	4.5	4.4	3.8	4.4	4.4	4.2	4.3
	Elongation at break	%	ISO 527	9	9	45	30	35	34	33	40	26	35	40	50	50	35	30	45	40	50	40
	Tensile modulus	MPa	ISO 527	3000	3000	3000	2950	2950	2800	2800	3000	3000	2900	3100	2800	2900	3100	2850	2900	3100	3150	3100
	Notched Charpy at 23°C	kJ/m²	ISO 179	4.4	4.4	4.7	5.0	4.2	5.6	5.0	5.4	4.6	5.5	5.4	4.6	4.7	5.1	4.7	6.6	6.1	6.2	6.2
	Notched Charpy at -30°C	kJ/m²	ISO 179	4.3	4.3	4.5	5.3	4.7	3.3	4.3	4.2	3.9	4.9	4.2	3.9	4.6	5.3	4.1	5.7	6.4	6.4	6.6
	Unnotched Charpy at 23°C	kJ/m²	ISO 179	NB	NB	NB	NB	NB	NB	NB	NB	NB	NB	NB	NB	NB	NB	NB	NB	NB	NB	NB
	Unnotched Charpy at -30°C	kJ/m²	ISO 179	70	70	NB	NB	NB	NB	260	410	NB	NB	NB	NB	NB	NB	NB	100	NB	NB	NB
Thermal	Notched Izod at 23°C	kJ/m²	ISO 180	3.7	3.7	4.8	4.2	4.0	6.4	3.8	4.9	4.0	4.4	4.7	5.0	5.0	4.0	4.8	5.0	4.9	5.5	4.7
	Melting temperature	°C	ISO 11357	265	265	264	263	262	260	258	261	259	262	259	261	263	262	262	261	263	262	262
	HDT at 0.45 MPa	°C	ISO 75	207	207	199	197	196	193	191	198	190	197	200	192	205	199	207	187	202	206	191
	HDT at 1.80 MPa	°C	ISO 75	73	73	69	69	69	68	62	68	62	67	72	71	73	68	65	64	68	72	65

INVISTA Nylon Polymer

INVISTA is a global leader in the production of nylon intermediates and polymer resins. For more than 45 years, we’ve made nylon polymers that serve as the foundation for many different products across multiple markets, including automotive, industrial, apparel and consumer electronics industries, to name just a few.

We are committed to helping our customers overcome their challenges and meet their objectives by providing the right resins and ingredients for their needs. Looking toward the future, we are continuing to strengthen our capabilities by investing in new ADN facilities.

Request a Sample Today

INVISTA PA66 feedstock resins are available for sampling and qualification.

Contact us today at nylonpolymer.invista.com to learn how INVISTA can support your material needs.



nylonpolymer.invista.com

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