



ASCEND VYDYNE® NYLON FEEDSTOCK RESINS FOR COMPOUNDING

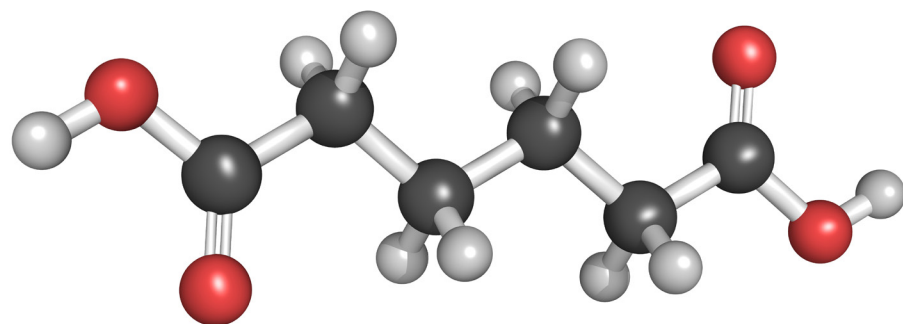
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Entec Polymers is a supplier of Ascend Performance Materials line of VYDYNE® Nylon 66 and Nylon 66/6 copolymers for use as feedstock resins for nylon compounds.

Key attributes of these products include:

- ✓ Tight control of molecular weight for consistent viscosity
- ✓ Optimized balance of end groups for better mixing and flow
- ✓ Low yellowness index for use in natural colored compounds
- ✓ Low black specks for use in natural colored compounds
- ✓ Uniform size and shape of pellets for consistent feeding and melting



These high quality VYDYNE® nylon resins are available with a range of relative viscosity from very low to very high allowing for greater versatility in selecting the most appropriate base resin viscosity to meet the needs of the final compound. This is especially important when the compound will contain high levels of reinforcing fillers or impact modifiers which will reduce the overall flow properties of the final compound.

The low viscosity VYDYNE® grades can be used when compounding shear-sensitive materials or compounds utilizing high filler loading levels. Medium and high viscosity grades of VYDYNE® provide good dispersive mixing which helps to break up large particles and better disperse them throughout the melt during compounding all while minimizing degradation of the nylon.

VYDYNE® 21Z-NT01A2 is a special grade that has a high concentration of amine end groups which is an advantage when compounding moisture-sensitive formulations.



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Low Viscosity Nylon 66 Resins

GRADE	RELATIVE VISCOSITY (Formic Acid)	VISCOSITY NUMBER (Sulfuric Acid)	MOISTURE CONTENT, %	YELLOWNESS INDEX (max)	AMINE END GROUPS, mmol/kg	PRODUCT DESCRIPTION
21ZLV	34 - 37	111.6 - 119.3	<0.35	4	50 - 54	Low viscosity resin designed for reactive compounding formulations
21LS	34.5 - 37.5	112.9 - 120.5	<0.5	4	---	Low viscosity resin designed for high-flow compounds

Medium Viscosity Nylon 66 Resins

GRADE	RELATIVE VISCOSITY (Formic Acid)	VISCOSITY NUMBER (Sulfuric Acid)	MOISTURE CONTENT, %	YELLOWNESS INDEX (max)	AMINE END GROUPS, mmol/kg	PRODUCT DESCRIPTION
21Z	44.2 - 48.2	135 - 143.2	<0.5	8	---	General purpose medium viscosity resin
21Z-NT01A2	45 - 49	---	<0.5	8	78 - 85	High amine end group functionalized
50BW	45 - 51	136.9 - 148.3	<0.2	0	--	Medium viscosity resin with low yellowness index and low moisture content

High Viscosity Nylon 66 Resins

GRADE	RELATIVE VISCOSITY (Formic Acid)	VISCOSITY NUMBER (Sulfuric Acid)	MOISTURE CONTENT, %	YELLOWNESS INDEX (max)	AMINE END GROUPS, mmol/kg	PRODUCT DESCRIPTION
52BWMS	50 - 54	---	<0.35	0	---	Low yellowness index, medium to high viscosity resin
63A	75 - 90	183 - 200	<0.1	7	---	High viscosity resin for improved melt strength
65B	117 - 145	223 - 243	<0.1	12	---	High viscosity resin for improved melt strength

Medium Viscosity Nylon 66/6 Resins

GRADE	RELATIVE VISCOSITY (Formic Acid)	VISCOSITY NUMBER (Sulfuric Acid)	MOISTURE CONTENT, %	YELLOWNESS INDEX (max)	AMINE END GROUPS, mmol/kg	PRODUCT DESCRIPTION
85XFS	44 - 50	---	<0.5	8	240 - 248	General purpose resin with good surface finish and high toughness
86XFS	45 - 51	---	<0.5	8	230 - 238	Low melt temperature copolymer with high elongation
88X	45 - 51	---	<0.5	0	245 - 259	Low yellowness index resin with good surface finish

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