

Vydyne® 63A

polyamide 66



Vydyne 63A is a medium-viscosity resin used for injection-molding and extrusion compounding. It is desirable to include this neat resin in a formulation in which the melt strength of the final product is critical for the application. Vydyne 63A exhibits good initial color and it has a moisture level below 0.1%. This product offers high strength, rigidity and toughness over a broad range of demanding applications. Resistance of Vydyne 63A to heat, oil and wear is typical of PA66 neat resins.

General

Regional Availability	• North America	• Europe	• Asia Pacific
Features	• Chemical Resistant • Good Color Stability • Oil Resistant	• Gasoline Resistant • High Melt Strength • Solvent Resistant	• General Purpose • Medium Viscosity
Agency Rating	• ASTM, D6779 PA0112 • FDA, 21 CFR 177.1500	• EC, 1935/2004 • ASTM, D4066 PA0112	• EU, 10/2011 • EU, 2023/2006
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Injection Molding	• Other Extrusion	

Physical

	dry	cond.	Unit	Test Standard
Density	1.14	-	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 23°C, 2.00 mm	1.9	*	%	
Flow : 23°C, 2.00 mm	1.9	*	%	
Water Absorption				ISO 62
Equilibrium, 23°C, 50% RH	2.5	*	%	
Water Absorption, Saturation, 23°C	8.5		%	ISO 62
Relative Viscosity, Sulphuric Acid	183 - 200		-	ISO 307
Relative Viscosity, Formic Acid	75 - 90		-	ASTM D 789
Moisture Content	0.1		%	ASTM D 6869
Yellowness Index	2		YI	ASTM D 1925

Mechanical

	dry	cond.	Unit	Test Standard
Tensile Modulus (23°C)	3200	1700	MPa	ISO 527-2
Tensile Stress (Yield, 23°C)	85	55	MPa	ISO 527-2
Tensile Stress (Break, 23°C)	55	65	MPa	ISO 527-2
Tensile Strain (Yield, 23°C)	5	20	%	ISO 527-2
Tensile Strain (Break, 23°C)	25	200	%	ISO 527-2
Flexural Modulus (23°C)	2500	700	MPa	ISO 178
Flexural Strength (23°C)	70	20	MPa	ISO 178

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Poisson's Ratio (23°C)	0.4	-	ISO 527-2	
Impact	dry	cond.	Unit	Test Standard
Charpy Notched Impact Strength				ISO 179/1eA
+23°C	6	25	kJ/m²	
-30°C	5	9	kJ/m²	
Charpy Unnotched Impact Strength				ISO 179/1eU
+23°C	N	N	kJ/m²	
-30°C	N	N	kJ/m²	
Notched Izod Impact Strength				ISO 180/1A
+23°C	6	25	kJ/m²	
-30°C	5	9	kJ/m²	
Thermal	dry	cond.	Unit	Test Standard
Heat Deflection Temperature				ISO 75-2/A
1.80 MPa, Unannealed	68	-	°C	
0.45 MPa, Unannealed	190	-	°C	
Melting Temperature	260	*	°C	ISO 11357-3
CLTE				ISO 11359-2
Flow : 23 to 55°C, 2.00 mm	100	*	E-6/K	
Transverse : 23 to 55°C, 2.00 mm	100	*	E-6/K	
Extrusion	Value		Unit	
Cylinder Zone 1 Temp	250 - 295		°C	
Cylinder Zone 2 Temp	250 - 295		°C	
Cylinder Zone 3 Temp	250 - 295		°C	
Cylinder Zone 4 Temp	250 - 295		°C	
Cylinder Zone 5 Temp	250 - 295		°C	
Melt temperature	270 - 295		°C	
Die temperature	270 - 295		°C	

