

PROPERTIES OF UNREINFORCED VYDYNE GRADES

Properties 1)						High Flow			
						Method		ZISP ⁶⁾	
						Units	ASTM	ISO	DIN
M E C H A N I C A L	Tensile Strength at Yield	MPa	D 638	527	53455	7.81	62		
	Elongation at Break	%	D 638	527	53455	70	>200		
	Flexural Modulus	MPa	D 790	178	53457	2750	1310		
	Notched Izod Impact	kJ/m ²	D 256	180	-	5.3	16		
T H E R M A L	Melting Point, DSC	°C	D3417	5146	-	260			
	Maximum Peak ⁴⁾ Temperature	°C	D 648	75/B	53461	230	220		
	Deflection Temperature Under Load at 1.82 MPa	°C	D 648	75/A	53461	82	72		
	Maximum Continuous ⁵⁾ Operating Temperature (thickness = 1.5 mm)	°C	-	-	-	85			
	Coefficient of Linear Thermal Expansion	10 ⁻³ K ⁻¹	D 696	-	53752	8.1	-		
E L E C T R I C A L	Volume Resistivity	Ohm.m	D 257	IEC 93	53482	6x10 ¹¹	2x10 ¹¹		
	Dielectric Constant	10 ² Hertz	-	D 150	IEC 250	53483	3.7	6.0	
		10 ³ Hertz					3.6	6.0	
		10 ⁶ Hertz					3.1	3.5	
	Dissipation Factor	10 ² Hertz	-	D 150	IEC 250	53483	0.02	0.04	
10 ³ Hertz		0.02					0.04		
10 ⁶ Hertz		0.03					0.08		
Comparative Tracking - Index	M Volts	D 3638	IEC 112	53480	600 500				
M I S C E L L A N E O U S	Glow Wire Flammability Index (thickness = 1.5 mm)	°C	-	IEC 695-2 -1/2	VDE 0471 Part 4	850			
	Flammability ⁵⁾ , 0.8 mm	UL 94	-	-	-	V-2			
	Density	g/cm ³	D 792	1183	53479	1.14			
	Rockwell Hardness	M scale	-	D 785	2039/2	-	85	60	
		R scale					112	105	
	Mould Shrinkage, Flow direction	%	Monsanto test				- 1.9		
	Equilibrium Moisture Absorption at 23 °C, 50 % R. H.	%	-	1110	53714	2.5			
Recommended Processing Melt Temperature	°C	-	-	-	- 280				

THIS IS
MATERIAL - USED
IN PART NO

701 6743
706 1357.

1) Values measured at 23°C
 2) D.A.M. = Dry As Moulded
 3) 50% R.H = Conditioned to 50% relative humidity at 23°C
 4) Maximum Peak Temperature = Deflection temperature under load at 0.46 MPa
 5) UL 746B relative temp impact
 6) VYDYNE 21X has sim