

Technical Data Sheet

Vitamide VIT 66 VN NAT 6543



Polyamide 66

Product Description

General purpose, Medium viscosity, Lubricated Polyamide 66. Suitable for a wide range of applications this grade offers an effective cycle time and a good balance of stiffness and impact strength. Available with enhanced UV (AS20), heat stability (AS30) and cycle time performance (AS40). Colour matched compounds and customer specific performance requirements are available on request. Listed as V2 under UL File Reference E132739

Processing Method Injection Molding

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density	1.13	g/cm ³	ISO 1183
Mechanical			
Tensile Strain at Break	40	%	ISO 527-2
Flexural Modulus	2900	MPa	ISO 178
Tensile Stress at Break	85	MPa	ISO 527-2
Flexural Stress	105	MPa	ISO 178
Impact			
Charpy Impact Strength - Notched, (23 °C, Type 1, Edgewise, Notch A)	4.5	kJ/m ²	ISO 179
Notched Izod Impact Strength	5	kJ/m ²	ISO 180
Hardness			
Shore Hardness, (Shore D)	84		ISO 868
Rockwell Hardness, (R-Scale)	120		ISO 2039-2
Ball Indentation Hardness	155	MPa	ISO 2039-1
Thermal			
Vicat Softening Temperature, (B (50N), 120 °C/h)	198	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa)	223	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa)	80	°C	ISO 75-2/A
Melting Temperature	260	°C	ISO 11357-3
Electrical			
Dielectric Strength	27	kV/mm	ASTM D149
Comparative Tracking Index (CTI)	600	V	IEC 60112
Surface Resistivity	1E+16	ohm	ASTM D257
Flammable			
Burning Rate	100	mm/min	ISO 3795
Glow Wire Flammability Index	850	°C	IEC 60695-2-12
Additional Information			

Molding Shrinkage	1.5	%	ISO 294-4
Water Absorption 23C/50RH	2.3	%	ISO 62
Water Absorption 24h/23C	1.5	%	ISO 62
Water Absorption Sat/23C	8.5	%	ISO 62

UL Information

Flame Rating	V-2	UL 94
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Injection Parameters	Nominal	
	Value	Units
Drying Time	3.0 to 4.0	hr
Drying Temperature	80	°C
Processing (Melt) Temp	270 to 290	°C
Mold Temperature	60 to 100	°C