Technical Data Sheet

Vitamide 66 AR3X NAT

Polyamide 66

Product Description

Vitamide VIT 66 AR3X NAT is a Polyamide 66 Glass Fiber, 50% filled material and is typically used in Injection Molding applications. Features include: Heat Stabilized.

Processing Method	Injection Molding
Attribute	Heat Stabilized
Additive	Heat Stabilizer
Application	Closures
Filler/Reinforcement	Glass Fiber, 50%

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density	1.58	g/cm³	ISO 1183
Viscosity Number, (96% H2SO4 (Sulphuric Acid))	145	cm³/g	ISO 307
Mechanical			
Tensile Strain at Break			
(Type 1A, 5 mm/min)	2.5	%	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	3.3	%	ISO 527-2
Flexural Modulus, (2.0 mm/min)	15500	MPa	ISO 178
Tensile Stress at Break			
(Type 1A, 5 mm/min)	260	MPa	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	210	MPa	ISO 527-2
Tensile Modulus			
(5 mm/min, Type 1A)	16500	MPa	ISO 527-1
(5 mm/min, Type 1A) - Conditioned	13000	MPa	ISO 527-1
Flexural Stress			
(2.0 mm/min, 3.5%)	405	MPa	ISO 178
(2.0 mm/min, 3.5%)	400	MPa	ISO 178
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	18	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	15	kJ/m²	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	20	kJ/m²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	90	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise)	90	kJ/m²	ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	No Break		ISO 179

Thermal			
Deflection Temperature Under Load Unannealed (0.45 MPa)	>250	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa)	>250	°C	ISO 75-2/A
Flammable			
Burning Rate			
(2.00 mm)	<100	mm/min	ISO 3795
(2.00 mm)	<100	mm/min	FMVSS 302

Injection Parameters	Nominal Value	Units
Drying Time	3.0 to 4.0	hr
Drying Temperature	80	°C
Processing (Melt) Temp	280 to 300	°C
Mold Temperature	60 to 120	°C