

Durethan® AKV 50 H3.0 000000

Polyamide 66

LANXESS GmbH

Message:

PA 66, 50 % glass fibers, injection molding, heat-aging stabilized

General Information			
UL YellowCard	E245249-473559		
Filler / Reinforcement	Glass Fiber,50% Filler by Weight		
Additive	Heat Stabilizer		
Features	Heat Stabilized		
Processing Method	Injection Molding		
Physical	Nominal Value	Unit	Test Method
Density (23°C)	1.57	g/cm ³	ISO 1183
Apparent Density	0.70	g/cm ³	ISO 60
Molding Shrinkage			ISO 2577
Across Flow : 300°C, 2.00 mm ¹	0.93	%	
Across Flow : 120°C, 4 hr, 2.00 mm ²	0.090	%	
Flow : 300°C, 2.00 mm ³	0.37	%	
Flow : 120°C, 4 hr, 2.00 mm ⁴	0.050	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (23°C)	16000	MPa	ISO 527-2/1
Tensile Stress (Break, 23°C)	230	MPa	ISO 527-2/5
Tensile Strain (Break, 23°C)	2.5	%	ISO 527-2/5
Flexural Modulus ⁵ (23°C)	15300	MPa	ISO 178/A
Flexural Stress ⁶ (23°C)	360	MPa	ISO 178/A
Flexural Strain at Flexural Strength ⁷ (23°C)	3.0	%	ISO 178/A
ISO Shortname	PA 66, GHR, 14-160, GF50		ISO 1874
Residual Moisture Content	0.030 to 0.12	%	Karl Fisher
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-40°C	14	kJ/m ²	
-30°C	15	kJ/m ²	
23°C	17	kJ/m ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-30°C	100	kJ/m ²	
23°C	100	kJ/m ²	
Notched Izod Impact Strength			ISO 180/1A
-30°C	13	kJ/m ²	
23°C	15	kJ/m ²	

Unnotched Izod Impact Strength			ISO 180/1U
-30°C	90	kJ/m ²	
23°C	90	kJ/m ²	
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature			
0.45 MPa, Unannealed	250	°C	ISO 75-2/B
1.8 MPa, Unannealed	250	°C	ISO 75-2/A
Melting Temperature ⁸	262	°C	ISO 11357-3
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+16	ohms	IEC 60093
Volume Resistivity (23°C)	1.0E+15	ohms·cm	IEC 60093
Electric Strength (23°C, 1.00 mm)	38	kV/mm	IEC 60243-1
Relative Permittivity			IEC 60250
23°C, 100 Hz	5.00		
23°C, 1 MHz	4.40		
Dissipation Factor			IEC 60250
23°C, 100 Hz	0.025		
23°C, 1 MHz	0.023		
Comparative Tracking Index (Solution A)	500	V	IEC 60112
Injection	Nominal Value	Unit	Test Method
Drying Temperature - Dry Air Dryer	80.0	°C	
Drying Time - Dry Air Dryer	2.0 to 6.0	hr	
Processing (Melt) Temp	280 to 300	°C	
Mold Temperature	80.0 to 120	°C	
NOTE			
1.	60x60x2mm, 80°C MT, 600 bar		
2.	60x60x2mm		
3.	60x60x2mm, 80°C MT, 600 bar		
4.	60x60x2mm		
5.	2.0 mm/min		
6.	2.0 mm/min		
7.	2 mm/min		
8.	10°C/min		

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

