

Durethan® AKV 35 H2.0 SR1 901510

Polyamide 66

LANXESS Corporation

Message:

PA 66, 35 % glass fibers, injection molding, heat-aging stabilized, improved surface finish

General Information				
Filler / Reinforcement		Glass Fiber,35% Filler by Weight		
Additive		Heat Stabilizer		
Features		Good Heat Aging Resistance		
		Good Surface Finish		
Agency Ratings		EC 1907/2006 (REACH)		
Forms		Pellets		
Processing Method		Injection Molding		
Physical	Dry	Conditioned	Unit	Test Method
Density (23°C)	1.41	--	g/cm ³	ISO 1183
Molding Shrinkage				
Across Flow : 300°C, 2.00 mm ¹	1.0	--	%	ISO 294-4
Across Flow : 120°C, 2 hr, 2.00 mm ²	0.090	--	%	ISO 294-4
Flow : 300°C, 2.00 mm ³	0.32	--	%	ISO 294-4
Flow : 120°C, 2 hr, 2.00 mm ⁴	0.070	--	%	ISO 294-4
Across Flow : 300°C, 3.00 mm ⁵	1.4	--	%	ISO 2577
Across Flow : 120°C, 2 hr, 3.00 mm ⁶	0.040	--	%	ISO 294-4
Flow : 300°C, 3.00 mm ⁷	0.35	--	%	ISO 2577
Flow : 120°C, 2 hr, 3.00 mm ⁸	0.030	--	%	ISO 2577
Water Absorption				ISO 62
Saturation, 23°C	5.0	--	%	
Equilibrium, 23°C, 50% RH	1.8	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (23°C)	11200	7500	MPa	ISO 527-2/1
Tensile Stress (Break, 23°C)	190	130	MPa	ISO 527-2/5
Tensile Strain (Break, 23°C)	3.0	5.0	%	ISO 527-2/5
Tensile Creep Modulus				ISO 899-1
1 hr	7000	--	MPa	

1000 hr	5800	--	MPa	
Flexural Modulus ⁹ (23°C)	10500	6700	MPa	ISO 178/A
Flexural Stress ¹⁰				
3.5% Strain	--	170	MPa	ISO 178/A
23°C	295	200	MPa	ISO 178
Flexural Strain at Flexural Strength ¹¹ (23°C)	4.0	6.0	%	
ISO Shortname	PA 66, GHR, 14-110, GF35	--		ISO 1874
Residual Moisture Content	0.030 to 0.12		%	Karl Fisher
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-30°C	10	10	kJ/m ²	
23°C	12	20	kJ/m ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-30°C	70	75	kJ/m ²	
23°C	80	90	kJ/m ²	
Notched Izod Impact Strength				ISO 180/1A
-40°C	< 10	< 10	kJ/m ²	
-30°C	< 10	< 10	kJ/m ²	
Unnotched Izod Impact Strength				ISO 180/1U
-30°C	65	--	kJ/m ²	
23°C	75	--	kJ/m ²	
Thermal	Dry	Conditioned	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
Vicat Softening Temperature	> 230	--	°C	ISO 306/B120
Melting Temperature ¹²	263	--	°C	ISO 11357-3
CLTE				ISO 11359-2
Flow : 23 to 55°C	2.0E-5	--	cm/cm/°C	
Transverse : 23 to 55°C	1.0E-4	--	cm/cm/°C	
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	1.0E+15	1.0E+13	ohms	IEC 60093
Volume Resistivity (23°C)	1.0E+15	1.0E+12	ohms·cm	IEC 60093
Electric Strength (23°C, 1.00 mm)	35	30	kV/mm	IEC 60243-1
Relative Permittivity				IEC 60250
23°C, 100 Hz	4.00	10.0		
23°C, 1 MHz	4.00	4.00		

Dissipation Factor				IEC 60250
23°C, 100 Hz	0.011	0.21		
23°C, 1 MHz	0.015	0.065		
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating				UL 94
1.60 mm	HB	--		
3.20 mm	HB	--		
Glow Wire Flammability Index (2.00 mm)	600	--	°C	IEC 60695-2-12
Oxygen Index ¹³	23	--	%	ISO 4589-2
Injection	Dry	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.	60x60x2; MT 80°C; 600 Bar			
2.	60x60x2			
3.	60x60x2; MT 80°C; 600 Bar			
4.	60x60x2			
5.	150x150x3; MT 80°C; 400 Bar			
6.	150x150x3			
7.	150x150x3; MT 80°C; 400 Bar			
8.	150x150x3			
9.	2.0 mm/min			
10.	2.0 mm/min			
11.	Pull Rate: 2 mm/min; 50% RH			
12.	10°C/min			
13.	Procedure A			

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



WECHAT