

Durethan® AKV 325 H2.0 901510

Polyamide 66

LANXESS GmbH

Message:

PA 66, 25 % glass fibers, extrusion, blow molding, heat-aging stabilized, hydrolysis stabilized

General Information				
Filler / Reinforcement	Glass fiber reinforced material, 25% filler by weight			
Additive	Hydrolysis resistance heat stabilizer			
Features	Thermal Stability			
Agency Ratings	EC 1907/2006 (REACH)			
Processing Method	Blow molding Extrusion			
Physical	Dry	Conditioned	Unit	Test Method
Density (23°C)	1.31	--	g/cm ³	ISO 1183
Apparent Density	0.70	--	g/cm ³	ISO 60
Molding Shrinkage				ISO 2577
Vertical flow direction: 280°C, 2.00mm ¹	0.80	--	%	ISO 2577
Vertical flow direction: 120°C, 4 hours, 2.00mm ²	0.10	--	%	ISO 2577
Flow direction: 280°C, 2.00mm ³	0.80	--	%	ISO 2577
Flow direction: 120°C, 4 hours, 2.00mm ⁴	0.10	--	%	ISO 2577
Water Absorption				ISO 62
Saturated, 23°C	6.6	--	%	ISO 62
Equilibrium, 23°C, 50% RH	2.0	--	%	ISO 62
Hardness	Dry	Conditioned	Unit	Test Method
Ball Indentation Hardness	190	90.0	MPa	ISO 2039-1
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus				
23°C	8900	--	MPa	ASTM D638
23°C	8200	5000	MPa	ISO 527-2/1
Tensile Strength				
Fracture, 23°C	160	--	MPa	ASTM D638
Fracture, 23°C	150	100	MPa	ISO 527-2/5
Tensile Elongation				

Fracture, 23°C	3.5	--	%	ASTM D638
Fracture, 23°C	3.8	10	%	ISO 527-2/5
Flexural Modulus				
23°C	7240	--	MPa	ASTM D790
23°C ⁵	7200	4200	MPa	ISO 178/A
Flexural Strength				
3.5% strain, 23°C	220	--	MPa	ASTM D790
3.5% strain, 23°C	220	105	MPa	ISO 178/A
23°C ⁶	240	140	MPa	ISO 178/A
Flexural Strain at Flexural Strength ⁷ (23°C)	4.7	7.0	%	ISO 178/A
Burning Behavior ⁸	passed	--		ISO 3795
ISO Shortname	PA 66, EH, 14-080, GF25	--		ISO 1874
Residual Moisture Content	0.030 - 0.12		%	Karl Fisher
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-30°C	< 10	< 10	kJ/m ²	ISO 179/1eA
23°C	< 10	15	kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength				ISO 179/1eU
-30°C	65	65	kJ/m ²	ISO 179/1eU
23°C	80	90	kJ/m ²	ISO 179/1eU
Notched Izod Impact				ISO 180/1A
-30°C	< 10	< 10	kJ/m ²	ISO 180/1A
23°C	10	15	kJ/m ²	ISO 180/1A
Unnotched Izod Impact Strength				ISO 180/1U
-30°C	60	55	kJ/m ²	ISO 180/1U
23°C	70	70	kJ/m ²	ISO 180/1U
Multi-Axial Instrumented Impact Energy				ISO 6603-2
-30°C	2.10	--	J	ISO 6603-2
23°C	2.60	--	J	ISO 6603-2
Multi-Axial Instrumented Impact Peak Force				ISO 6603-2
-30°C	747	--	N	ISO 6603-2
23°C	862	--	N	ISO 6603-2
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				
0.45 MPa, not annealed	> 250	--	°C	ISO 75-2/B
1.8 MPa, not annealed	236	--	°C	ISO 75-2/A
Vicat Softening Temperature				
	> 240	--	°C	ISO 306/B120

Melting Temperature ⁹	261	--	°C	ISO 11357-3
Linear thermal expansion coefficient				ISO 11359-2
Flow: 23 to 55°C	3.0E-5	--	cm/cm/°C	ISO 11359-2
Lateral: 23 to 55°C	1.0E-4	--	cm/cm/°C	ISO 11359-2
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	1.0E+14	--	ohms	IEC 60093
Volume Resistivity (23°C)	1.0E+15	--	ohms·cm	IEC 60093
Dielectric Strength (23°C, 1.00 mm)	32	--	kV/mm	IEC 60243-1
Relative Permittivity				IEC 60250
23°C, 100 Hz	4.20	--		IEC 60250
23°C, 1 MHz	3.80	--		IEC 60250
Dissipation Factor				IEC 60250
23°C, 100 Hz	0.010	--		IEC 60250
23°C, 1 MHz	0.018	--		IEC 60250
Comparative Tracking Index (Solution A)	425	--	V	IEC 60112
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating				UL 94
1.60 mm	HB	--		UL 94
3.20 mm	HB	--		UL 94
Glow Wire Flammability Index (2.00 mm)	600	--	°C	IEC 60695-2-12
Injection	Dry	Unit	Test Method	
Drying Temperature - Dry Air Dryer	80.0		°C	
Drying Time - Dry Air Dryer	2.0 - 6.0		hr	
Processing (Melt) Temp	280 - 300		°C	
Mold Temperature	80.0 - 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.	US-FMVSS302			
9.	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



WECHAT