

Lanxess Durethan® AKV 30 H3.0 000000 Nylon 66, 30% Glass Fibers

Category : Polymer , Thermoplastic , Nylon , Nylon 66 , Nylon 66, 30% Glass Fiber Filled

Material Notes:

PA 66, 30% glass fibers, injection molding, heat-ageing stabilized

Order this product through the following link:

http://www.lookpolymers.com/polymer_Lanxess-Durethan-AKV-30-H30-000000-Nylon-66-30-Glass-Fibers.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.36 g/cc	1.36 g/cc	ISO 1183
Bulk Density	0.700 g/cc	0.0253 lb/in ³	ISO 60
Moisture Absorption at Equilibrium	1.9 %	1.9 %	50% RH; ISO 62
Water Absorption at Saturation	5.5 %	5.5 %	ISO 62
Linear Mold Shrinkage, Flow	0.0040 cm/cm @Thickness 2.00 mm	0.0040 in/in @Thickness 0.0787 in	Mold Temp 80°C; Melt Temp 300°C; 600 bar; ISO 294-4
Linear Mold Shrinkage, Transverse	0.011 cm/cm @Thickness 2.00 mm	0.011 in/in @Thickness 0.0787 in	Mold Temp 80°C; Melt Temp 300°C; 600 bar; ISO 294-4

Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	130 MPa	18900 psi	Conditioned; ISO 2039-1
	230 MPa	33400 psi	ISO 2039-1
Tensile Strength at Break	115 MPa	16700 psi	Conditioned; ISO 527-1,-2
	185 MPa	26800 psi	ISO 527-1,-2
Elongation at Break	3.5 %	3.5 %	ISO 527-1,-2
	6.5 %	6.5 %	Conditioned; ISO 527-1,-2
Tensile Modulus	6.00 GPa	870 ksi	Conditioned; ISO 527-1,-2
	9.50 GPa	1380 ksi	ISO 527-1,-2
Flexural Strength	185 MPa @Strain 6.00 %	26800 psi @Strain 6.00 %	Conditioned; ISO 178
	280 MPa @Strain 4.20 %	40600 psi @Strain 4.20 %	ISO 178
Flexural Yield Strength	145 MPa	21000 psi	Conditioned

Mechanical Properties	@Strain 3.50 % Metric	@Strain 3.50 % English	Comments
	260 MPa	37700 psi	
	@Strain 3.50 %	@Strain 3.50 %	
Flexural Modulus	5.50 GPa	798 ksi	Conditioned; ISO 178
	8.50 GPa	1230 ksi	ISO 178
Izod Impact, Notched (ISO)	10.0 kJ/m ²	4.76 ft-lb/in ²	ISO 180-1A
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	<= 10.0 kJ/m ²	<= 4.76 ft-lb/in ²	ISO 180-1A
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	<= 10.0 kJ/m ²	<= 4.76 ft-lb/in ²	Conditioned; ISO 180-1A
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	15.0 kJ/m ²	7.14 ft-lb/in ²	Conditioned; ISO 180-1A
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Izod Impact, Unnotched (ISO)	55.0 kJ/m ²	26.2 ft-lb/in ²	ISO 180-1U
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	55.0 kJ/m ²	26.2 ft-lb/in ²	Conditioned; ISO 180-1U
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	65.0 kJ/m ²	30.9 ft-lb/in ²	ISO 180-1U
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	65.0 kJ/m ²	30.9 ft-lb/in ²	Conditioned; ISO 180-1U
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Charpy Impact Unnotched	6.00 J/cm ²	28.6 ft-lb/in ²	ISO 179-1eU
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	6.00 J/cm ²	28.6 ft-lb/in ²	Conditioned; ISO 179-1eU
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	7.50 J/cm ²	35.7 ft-lb/in ²	

Mechanical Properties	Metric @Temperature 23.0 °C	English @Temperature 73.4 °F	ISO 179-1eU Comments
	8.00 J/cm ²	38.1 ft-lb/in ²	Conditioned; ISO 179-1eU
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Charpy Impact, Notched	1.00 J/cm ²	4.76 ft-lb/in ²	ISO 179-1eA
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	1.00 J/cm ²	4.76 ft-lb/in ²	ISO 179-1eA
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	1.00 J/cm ²	4.76 ft-lb/in ²	Conditioned; ISO 179-1eA
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	1.50 J/cm ²	7.14 ft-lb/in ²	Conditioned; ISO 179-1eA
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Puncture Energy	1.90 J	1.40 ft-lb	ISO 6603-2
	@Load <=81.6 kg, Temperature -30.0 °C	@Load <=180 lb, Temperature -22.0 °F	
	2.50 J	1.84 ft-lb	ISO 6603-2
	@Load <=102 kg, Temperature 23.0 °C	@Load <=225 lb, Temperature 73.4 °F	
	4.20 J	3.10 ft-lb	Conditioned; ISO 6603-2
	@Load <=112 kg, Temperature 23.0 °C	@Load <=247 lb, Temperature 73.4 °F	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	30.0 Åµm/m-Å°C	16.7 Åµin/in-Å°F	ISO 11359-1,-2
CTE, linear, Transverse to Flow	90.0 Åµm/m-Å°C	50.0 Åµin/in-Å°F	ISO 11359-1,-2
Melting Point	262 Å°C	504 Å°F	ISO 11357-1,-3
Deflection Temperature at 0.46 MPa (66 psi)	>= 250 Å°C	>= 482 Å°F	ISO 75-1,-2
Deflection Temperature at 1.8 MPa (264 psi)	240 Å°C	464 Å°F	ISO 75-1,-2
Deflection Temperature at 8.0 MPa	185 Å°C	365 Å°F	ISO 75-1,-2
Vicat Softening Point	>= 230 Å°C	>= 446 Å°F	120Å°C/h; ISO 306

Thermal Properties	@Load 5.10 kg Metric	@Load 11.2 lb English	Comments
	>= 230 Â°C	>= 446 Â°F	50Â°C/h; ISO 306
	@Load 5.10 kg	@Load 11.2 lb	
Flammability, UL94	HB	HB	
	@Thickness 1.60 mm	@Thickness 0.0630 in	
	HB	HB	
	@Thickness 3.20 mm	@Thickness 0.126 in	
Glow Wire Test	650 Â°C	1200 Â°F	IEC 60695-2-12
	@Diameter 0.800 mm	@Diameter 0.0315 in	
	700 Â°C	1290 Â°F	IEC 60695-2-12
	@Diameter 1.60 mm	@Diameter 0.0630 in	
	700 Â°C	1290 Â°F	IEC 60695-2-12
	@Diameter 3.00 mm	@Diameter 0.118 in	
Shrinkage	0.040 %	0.040 %	Molding Post-shrinkage; ISO 294-4
	@Temperature 120 Â°C, Time 14400 sec	@Temperature 248 Â°F, Time 4.00 hour	
	0.10 %	0.10 %	Molding Post-shrinkage; ISO 294-4
	@Temperature 120 Â°C, Time 14400 sec	@Temperature 248 Â°F, Time 4.00 hour	

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+15 ohm-cm	1.00e+15 ohm-cm	IEC 60093
Surface Resistance	1.00e+14 ohm	1.00e+14 ohm	IEC 60093
Dielectric Constant	4.0	4.0	IEC 60250
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
	4.5	4.5	IEC 60250
	@Frequency 100 Hz	@Frequency 100 Hz	
Dielectric Strength	40.0 kV/mm	1020 kV/in	IEC 60243-1
	@Thickness 1.00 mm	@Thickness 0.0394 in	
Dissipation Factor	0.010	0.010	IEC 60250
	@Frequency 100 Hz	@Frequency 100 Hz	
	0.018	0.018	

Electrical Properties	Metric @ Frequency 1.00e+6 Hz	English @ Frequency 1.00e+6 Hz	IEC 60250 Comments
Comparative Tracking Index	525 V	525 V	IEC 60112

Processing Properties	Metric	English	Comments
Melt Temperature	290 Â°C	554 Â°F	Processing conditions for test specimens; ISO 294
	280 - 300 Â°C	536 - 572 Â°F	Recommended
Mold Temperature	80.0 Â°C	176 Â°F	Processing conditions for test specimens; ISO 294
	80.0 - 120 Â°C	176 - 248 Â°F	Recommended
Drying Temperature	80.0 Â°C	176 Â°F	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China