

Akulon® K224-G6

Polyamide 6
DSM Engineering Plastics

Message:

Akulon® K224-G6 is a Polyamide 6 (Nylon 6) material filled with 30% glass fiber. It is available in Asia Pacific, Europe, or North America. Primary attribute of Akulon® K224-G6: Flame Rated.

General Information		
UL YellowCard	E43392-100177804	E47960-240098
Filler / Reinforcement	Glass Fiber,30% Filler by Weight	
Multi-Point Data	Isochronous Stress vs. Strain (ISO 11403-1)	
	Isothermal Stress vs. Strain (ISO 11403-1)	
	Secant Modulus vs. Strain (ISO 11403-1)	
	Shear Modulus vs. Temperature (ISO 11403-1)	
	Specific Volume vs Temperature (ISO 11403-2)	
	Viscosity vs. Shear Rate (ISO 11403-2)	

Physical	Dry	Conditioned	Unit	Test Method
Density	1.35	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	0.90	--	%	
Flow	0.30	--	%	
Water Absorption				ISO 62
Saturation, 23°C	6.3	--	%	
Equilibrium, 23°C, 50% RH	1.9	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	9500	6000	MPa	ISO 527-2
Tensile Stress (Break)	180	110	MPa	ISO 527-2
Tensile Strain (Break)	3.5	7.0	%	ISO 527-2
Flexural Modulus	8600	--	MPa	ISO 178
Flexural Stress	235	--	MPa	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-30°C	11	11	kJ/m ²	
23°C	12	25	kJ/m ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-30°C	75	75	kJ/m ²	
23°C	90	110	kJ/m ²	

Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				
0.45 MPa, Unannealed	220	--	°C	ISO 75-2/B
1.8 MPa, Unannealed	200	--	°C	ISO 75-2/A
Melting Temperature ¹	220	--	°C	ISO 11357-3
CLTE				ISO 11359-2
Flow	2.0E-5	--	cm/cm/°C	
Transverse	7.0E-5	--	cm/cm/°C	
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	--	1.0E+14	ohms	IEC 60093
Volume Resistivity	1.0E+15	1.0E+13	ohms·cm	IEC 60093
Electric Strength	30	25	kV/mm	IEC 60243-1
Relative Permittivity				IEC 60250
100 Hz	3.50	20.0		
1 MHz	3.30	5.00		
Dissipation Factor				IEC 60250
100 Hz	5.0E-3	0.30		
1 MHz	0.015	0.12		
Comparative Tracking Index	--	600	V	IEC 60112
Flammability	Dry	Conditioned	Unit	Test Method
Flammability Classification				IEC 60695-11-10, -20
0.750 mm	HB	--		
1.50 mm	HB	--		
Glow Wire Flammability Index				IEC 60695-2-12
1.50 mm	700	--	°C	
2.00 mm	700	--	°C	
Glow Wire Ignition Temperature				IEC 60695-2-13
1.50 mm	725	--	°C	
2.00 mm	725	--	°C	
Injection	Dry	Unit		
Drying Temperature	80.0		°C	
Drying Time	4.0 to 8.0		hr	
Rear Temperature	255 to 265		°C	
Middle Temperature	265 to 275		°C	
Front Temperature	265 to 280		°C	
Nozzle Temperature	260 to 280		°C	
Processing (Melt) Temp	250 to 285		°C	
Mold Temperature	50.0 to 80.0		°C	
Injection Rate	Moderate-Fast			

Back Pressure	3.00 to 10.0	MPa
Screw Compression Ratio	2.5:1.0	
NOTE		
1.	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

