

Akulon® Ultraflow K-FG3

Polyamide 6
DSM Engineering Plastics

Message:

Akulon® Ultraflow K-FG3 is a Polyamide 6 (Nylon 6) material filled with 15% glass fiber. It is available in Europe.
Important attributes of Akulon® Ultraflow K-FG3 are:
Flame Rated
High Flow

General Information				
Filler / Reinforcement		Glass Fiber, 15% Filler by Weight		
Features		High Flow		
Forms		Pellets		
Physical	Dry	Conditioned	Unit	Test Method
Density	1.23	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	0.93	--	%	
Flow	0.31	--	%	
Water Absorption				ISO 62
Saturation, 23°C	7.6	--	%	
Equilibrium, 23°C, 50% RH	2.3	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	5800	3400	MPa	ISO 527-2
Tensile Stress (Break)	110	65.0	MPa	ISO 527-2
Tensile Strain (Break)	3.0	8.5	%	ISO 527-2
Flexural Modulus	4500	--	MPa	ISO 178
Flexural Stress	160	--	MPa	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-30°C	5.0	5.0	kJ/m ²	
23°C	6.0	15	kJ/m ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-30°C	20	20	kJ/m ²	
23°C	25	35	kJ/m ²	
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				
0.45 MPa, Unannealed	215	--	°C	ISO 75-2/B
1.8 MPa, Unannealed	195	--	°C	ISO 75-2/A

Melting Temperature ¹	220	--	°C	ISO 11357-3
CLTE				ISO 11359-2
Flow	3.0E-5	--	cm/cm/°C	
Transverse	8.0E-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+15	ohms·cm	IEC 60093
Relative Permittivity				IEC 60250
100 Hz	3.50	14.0		
1 MHz	4.70	4.50		
Dissipation Factor				IEC 60250
100 Hz	5.5E-3	0.15		
1 MHz	0.018	0.12		
Comparative Tracking Index	--	600	V	IEC 60112
Flammability	Dry	Conditioned	Unit	Test Method
Flammability Classification (1.60 mm)	HB	--		IEC 60695-11-10, -20
Injection	Dry	Unit		
Drying Temperature	80.0		°C	
Drying Time	4.0 to 8.0		hr	
Rear Temperature	230 to 250		°C	
Middle Temperature	230 to 260		°C	
Front Temperature	230 to 260		°C	
Nozzle Temperature	250 to 280		°C	
Processing (Melt) Temp	245 to 270		°C	
Mold Temperature	40.0 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



WECHAT