

## DSM Akulon® K-FHG0 (Dry) 50% Glass Reinforced Nylon 6 (North America) (discontinued \*\*)

Category : Polymer , Thermoplastic , Nylon , Nylon 6 , Nylon 6 , 50% Glass Fiber Filled

### Material Notes:

Description: The Akulon portfolio is engineered for optimum performance to suit different processing techniques and end use markets. Unfilled Extrusion Resins Akulon resins are available with melt viscosities to suit all extrusion processes: barrier and coating film, tube and hose, monofilament, stock shapes. Akulon resins are characterized by: consistent quality high purity for film applications, low gel contents. Molding Resins Suited to all engineering demands: Unfilled low and medium viscosity grades Toughened unfilled grades Glass reinforced from 20-45% filled Low warpage reinforced grades Flame retardant; UL V0 rated and glow wire types Halogen free FR grades Blow moldable materials Laser markable resins Laser weldable, high burst pressure grades Toughened, reinforced resins High stiffness grades for metal replacement Akulon Ultraflow resins have high flow with mechanical properties similar to standard materials. Exceptional flow allows: productivity gains in molding lower built in stresses better surface appearance system cost reductions Applications for Molding resins There is an Akulon resin available suitable for any application requiring polyamides. Key areas where DSM has specific application knowledge are Automotive Under the hood and engine components Exterior and interior applications Electrical components and connectors Electrical Low voltage power distribution Lighting Power connectors Consumer Durables Power and lawn and garden tools Small Appliances Sports and leisure equipment Furniture accessories Industrial Goods Transportation (railways) Information provided by DSM.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_DSM-Akulon-K-FHG0-Dry-50-Glass-Reinforced-Nylon-6-North-America-nbspdiscontinued-.php](http://www.lookpolymers.com/polymer_DSM-Akulon-K-FHG0-Dry-50-Glass-Reinforced-Nylon-6-North-America-nbspdiscontinued-.php)

Physical Properties	Metric	English	Comments
Density	1.56 g/cc	0.0564 lb/in <sup>3</sup>	ISO 1183
Water Absorption	4.5 %	4.5 %	Sim. to ISO 62
Moisture Absorption at Equilibrium	1.4 %	1.4 %	Humidity Absorption; Sim. to ISO 62
Linear Mold Shrinkage, Flow	0.0020 cm/cm	0.0020 in/in	ISO 294-4
Linear Mold Shrinkage, Transverse	0.0090 cm/cm	0.0090 in/in	ISO 294-4

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	230 MPa	33400 psi	ISO 527-1/-2
Elongation at Break	2.5 %	2.5 %	ISO 527-1/-2
Tensile Modulus	16.5 GPa	2390 ksi	ISO 527-1/-2
Flexural Strength	350 MPa	50800 psi	ISO 178
Flexural Modulus	14.0 GPa	2030 ksi	ISO 178
Charpy Impact Unnotched	8.50 J/cm <sup>2</sup> @Temperature -30.0 °C	40.5 ft-lb/in <sup>2</sup> @Temperature -22.0 °F	ISO 179/1eU

Mechanical Properties	Metric	English	Comments
	@Temperature 23.0 °C	@Temperature 73.4 °F	ISO 179/1eJ
Charpy Impact, Notched	1.20 J/cm <sup>2</sup>	5.71 ft-lb/in <sup>2</sup>	ISO 179/1eA
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	1.50 J/cm <sup>2</sup>	7.14 ft-lb/in <sup>2</sup>	ISO 179/1eA
	@Temperature 23.0 °C	@Temperature 73.4 °F	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	10.0 µm/m-°C	5.56 µin/in-°F	ISO 11359-1/-2
	@Temperature 20.0 °C	@Temperature 68.0 °F	
CTE, linear, Transverse to Flow	50.0 µm/m-°C	27.8 µin/in-°F	ISO 11359-1/-2
	@Temperature 20.0 °C	@Temperature 68.0 °F	
Melting Point	220 °C	428 °F	10°C/min; ISO 11357-1/-3
Deflection Temperature at 0.46 MPa (66 psi)	220 °C	428 °F	ISO 75-1/-2
Deflection Temperature at 1.8 MPa (264 psi)	210 °C	410 °F	ISO 75-1/-2
Flammability, UL94	HB	HB	IEC 60695-11-10
	@Thickness 1.60 mm	@Thickness 0.0630 in	

Electrical Properties	Metric	English	Comments
Dielectric Constant	3.5	3.5	IEC 60250
	@Frequency 100 Hz	@Frequency 100 Hz	
	5.2	5.2	IEC 60250
	@Frequency 1e+6 Hz	@Frequency 1e+6 Hz	
Dissipation Factor	0.0050	0.0050	IEC 60250
	@Frequency 100 Hz	@Frequency 100 Hz	
	0.015	0.015	IEC 60250
	@Frequency 1e+6 Hz	@Frequency 1e+6 Hz	
Comparative Tracking Index	500 V	500 V	IEC 60112

Descriptive Properties	Value	Comments
Heat stabilized or stable to heat	Yes	

Injection molding Descriptive Properties	Yes Value	Comments
With Fillers	Yes	

## Contact Songhan Plastic Technology Co.,Ltd.

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