

DSM Akulon® K223-HM6 (BLACK) Nylon 6-30% Mineral Reinforced (European and Asian Grade) (Cond)

Category : Polymer , Thermoplastic , Nylon , Nylon 6 , Nylon 6 , 30% Mineral Filled

Material Notes:

The Akulon® product portfolio is engineered for optimum performance to suit different processing techniques and end use markets. Akulon Nylon 6 is used for extrusion applications including barrier film, stock shapes, convoluted tubes, and monofilament. Akulon XP is a high-productivity, high-performance PA6 grade for film extrusion processes. Medium viscosity, unreinforced or reinforced Akulon grades are used for various injection molding and blow molding applications. Akulon® Ultraflow® is a high-productivity, high-performance PA6 family for molding processes. Key applications for Akulon: Automotive: Intake manifold, Engine, Powertrain, Airbag containers, Exterior trim, Interior trim, Electrical components and connectors Consumer durables: Power tools, Lawn and garden tools, Small appliances, Sports and leisure equipment, Furniture, Industrial Goods, Transportation E&E: Low voltage switch gear/power distribution, Lighting, Power connectors Film: Specialty and barrier films Information provided by DSM.

Order this product through the following link:

http://www.lookpolymers.com/polymer_DSM-Akulon-K223-HM6-BLACK-Nylon-6-30-Mineral-Reinforced-European-and-Asian-Grade-Cond.php

| Physical Properties | Metric | English | Comments |
|------------------------------------|-----------|---------------------------|---|
| Density | 1.38 g/cc | 0.0499 lb/in ³ | (DAM); ISO 1183 |
| Water Absorption | 6.6 % | 6.6 % | DAM; Sim. to ISO 62 |
| Moisture Absorption at Equilibrium | 1.9 % | 1.9 % | Humidity Absorption (DAM); Sim. to ISO 62 |

| Mechanical Properties | Metric | English | Comments |
|---------------------------|-------------------------|----------------------------|--------------|
| Tensile Strength at Break | 40.0 MPa | 5800 psi | ISO 527-1/-2 |
| Elongation at Break | 4.5 % | 4.5 % | ISO 527-1/-2 |
| Tensile Modulus | 3.00 GPa | 435 ksi | ISO 527-1/-2 |
| Charpy Impact Unnotched | 4.50 J/cm ² | 21.4 ft-lb/in ² | ISO 179/1eU |
| | @Temperature -30.0 °C | @Temperature -22.0 °F | |
| Charpy Impact Unnotched | 5.00 J/cm ² | 23.8 ft-lb/in ² | ISO 179/1eU |
| | @Temperature 23.0 °C | @Temperature 73.4 °F | |
| Charpy Impact, Notched | 0.500 J/cm ² | 2.38 ft-lb/in ² | ISO 179/1eA |
| | @Temperature -30.0 °C | @Temperature -22.0 °F | |
| Charpy Impact, Notched | 0.600 J/cm ² | 2.86 ft-lb/in ² | ISO 179/1eA |
| | @Temperature 23.0 °C | @Temperature 73.4 °F | |

| Thermal Properties | Metric | English | Comments |
|-----------------------------------|---------------------|----------------------|--------------------------------|
| Melting Point | 220 °C | 428 °F | 10°C/min (DAM); ISO 11357-1/-3 |
| UL RTI, Electrical | 140 °C | 284 °F | UL746B |
| | @Thickness 1.50 mm | @Thickness 0.0591 in | |
| | 140 °C | 284 °F | UL746B |
| | @Thickness 0.710 mm | @Thickness 0.0280 in | |
| UL RTI, Mechanical with Impact | 100 °C | 212 °F | UL746B |
| | @Thickness 0.710 mm | @Thickness 0.0280 in | |
| | 110 °C | 230 °F | UL746B |
| | @Thickness 1.50 mm | @Thickness 0.0591 in | |
| UL RTI, Mechanical without Impact | 140 °C | 284 °F | UL746B |
| | @Thickness 1.50 mm | @Thickness 0.0591 in | |
| | 140 °C | 284 °F | UL746B |
| | @Thickness 0.710 mm | @Thickness 0.0280 in | |

| Electrical Properties | Metric | English | Comments |
|----------------------------|--------------------|--------------------|----------------|
| Volume Resistivity | 1.00e+13 ohm-cm | 1.00e+13 ohm-cm | IEC 60093 |
| Surface Resistance | 1.00e+13 ohm | 1.00e+13 ohm | IEC 60093 |
| Dielectric Constant | 4.5 | 4.5 | IEC 60250 |
| | @Frequency 1e+6 Hz | @Frequency 1e+6 Hz | |
| | 15 | 15 | IEC 60250 |
| | @Frequency 100 Hz | @Frequency 100 Hz | |
| Dielectric Strength | 25.0 kV/mm | 635 kV/in | IEC 60243-1 |
| Dissipation Factor | 0.11 | 0.11 | IEC 60250 |
| | @Frequency 1e+6 Hz | @Frequency 1e+6 Hz | |
| | 0.35 | 0.35 | IEC 60250 |
| | @Frequency 100 Hz | @Frequency 100 Hz | |
| Comparative Tracking Index | 400 - 599 V | 400 - 599 V | PLC 1; UL 746A |
| | 500 V | 500 V | |

| Descriptive Properties | Value | Comments |
|------------------------|-------|----------|
|------------------------|-------|----------|

| Descriptive Properties | Value | Comments |
|------------------------|-------|----------|
| Injection molding | Yes | |
| Release Agent | Yes | |
| With Fillers | Yes | |

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