

## DSM Akulon® S223-G8U (Dry) 43% Glass Reinforced Nylon 66 (North America) (discontinued \*\*)

Category : Polymer , Thermoplastic , Nylon , Nylon 66 , Nylon 66, 40% 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 appearances 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-S223-G8U-Dry-43-Glass-Reinforced-Nylon-66-North-America-nbspdiscontinued-.php](http://www.lookpolymers.com/polymer_DSM-Akulon-S223-G8U-Dry-43-Glass-Reinforced-Nylon-66-North-America-nbspdiscontinued-.php)

| Physical Properties                | Metric       | English                   | Comments                            |
|------------------------------------|--------------|---------------------------|-------------------------------------|
| Density                            | 1.48 g/cc    | 0.0535 lb/in <sup>3</sup> | ISO 1183                            |
| Water Absorption                   | 5.4 %        | 5.4 %                     | Sim. to ISO 62                      |
| Moisture Absorption at Equilibrium | 1.4 %        | 1.4 %                     | Humidity Absorption; Sim. to ISO 62 |
| Linear Mold Shrinkage, Flow        | 0.0030 cm/cm | 0.0030 in/in              | ISO 294-4                           |
| Linear Mold Shrinkage, Transverse  | 0.0080 cm/cm | 0.0080 in/in              | ISO 294-4                           |

| Mechanical Properties     | Metric                 | English                    | Comments     |
|---------------------------|------------------------|----------------------------|--------------|
| Tensile Strength at Break | 185 MPa                | 26800 psi                  | ISO 527-1/-2 |
| Elongation at Break       | 2.5 %                  | 2.5 %                      | ISO 527-1/-2 |
| Tensile Modulus           | 11.5 GPa               | 1670 ksi                   | ISO 527-1/-2 |
| Charpy Impact Unnotched   | 7.50 J/cm <sup>2</sup> | 35.7 ft-lb/in <sup>2</sup> | ISO 179/1eU  |
|                           | @Temperature -30.0 °C  | @Temperature -22.0 °F      |              |
|                           | 9.50 J/cm <sup>2</sup> | 45.2 ft-lb/in <sup>2</sup> | ISO 179/1eU  |
|                           | @Temperature 23.0 °C   | @Temperature 73.4 °F       |              |

| Mechanical Properties | Metric                 | English                    | Comments    |
|-----------------------|------------------------|----------------------------|-------------|
|                       | @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               | 20.0 µm/m-°C         | 11.1 µin/in-°F       | ISO 11359-1/-2           |
|                                             | @Temperature 20.0 °C | @Temperature 68.0 °F |                          |
| CTE, linear, Transverse to Flow             | 60.0 µm/m-°C         | 33.3 µin/in-°F       | ISO 11359-1/-2           |
|                                             | @Temperature 20.0 °C | @Temperature 68.0 °F |                          |
| Melting Point                               | 260 °C               | 500 °F               | 10°C/min; ISO 11357-1/-3 |
| Deflection Temperature at 0.46 MPa (66 psi) | 260 °C               | 500 °F               | ISO 75-1/-2              |
| Deflection Temperature at 1.8 MPa (264 psi) | 246 °C               | 475 °F               | ISO 75-1/-2              |
| Flammability, UL94                          | HB                   | HB                   | IEC 60695-11-10          |
|                                             | @Thickness 0.710 mm  | @Thickness 0.0280 in |                          |
|                                             | HB                   | HB                   | IEC 60695-11-10          |
|                                             | @Thickness 1.60 mm   | @Thickness 0.0630 in |                          |

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

## Contact Songhan Plastic Technology Co.,Ltd.

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