

## DSM Akulon® S223-PG8 PA66-GF40

Category : Polymer , Thermoplastic , Nylon , Nylon 66 , Nylon 66 , 40% Glass Fiber Filled

### Material Notes:

40% Glass Reinforced, Impact Modified

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_DSM-Akulon-S223-PG8-PA66-GF40.php](http://www.lookpolymers.com/polymer_DSM-Akulon-S223-PG8-PA66-GF40.php)

Physical Properties	Metric	English	Comments
Density	1.42 g/cc	0.0513 lb/in <sup>3</sup>	dry; ISO 1183
Water Absorption	4.5 %	4.5 %	Sim. To ISO 62
Moisture Absorption	1.20 %	1.20 %	Sim. To ISO 62

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	125 MPa	18100 psi	cond; ISO 527-1/-2
	175 MPa	25400 psi	dry; ISO 527-1/-2
Elongation at Break	3.5 %	3.5 %	dry; ISO 527-1/-2
	5.0 %	5.0 %	cond; ISO 527-1/-2
Tensile Modulus	7.50 GPa	1090 ksi	cond; ISO 527-1/-2
	11.5 GPa	1670 ksi	dry; ISO 527-1/-2
Charpy Impact Unnotched	9.50 J/cm <sup>2</sup>	45.2 ft-lb/in <sup>2</sup>	dry; ISO 179/1eU
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	9.50 J/cm <sup>2</sup>	45.2 ft-lb/in <sup>2</sup>	dry; ISO 179/1eU
	@Temperature -30.0 °C	@Temperature -22.0 °F	
Charpy Impact, Notched	1.40 J/cm <sup>2</sup>	6.66 ft-lb/in <sup>2</sup>	cond; ISO 179/1eA
	@Temperature -30.0 °C	@Temperature -22.0 °F	
Charpy Impact, Notched	1.40 J/cm <sup>2</sup>	6.66 ft-lb/in <sup>2</sup>	dry; ISO 179/1eA
	@Temperature -30.0 °C	@Temperature -22.0 °F	

Mechanical Properties	Metric	English	Comments
	2.00 J/cm <sup>2</sup>	9.52 ft-lb/in <sup>2</sup>	9/1eA
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	3.00 J/cm <sup>2</sup>	14.3 ft-lb/in <sup>2</sup>	cond; 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	dry; ISO 11359-1/-2
CTE, linear, Transverse to Flow	60.0 µm/m-°C	33.3 µin/in-°F	dry; ISO 11359-1/-2
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	dry; ISO 75-1/-2
Deflection Temperature at 1.8 MPa (264 psi)	245 °C	473 °F	dry; ISO 75-1/-2

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+13 ohm-cm	1.00e+13 ohm-cm	cond; IEC 60093
	1.00e+15 ohm-cm	1.00e+15 ohm-cm	dry; IEC 60093
Surface Resistance	1.00e+14 ohm	1.00e+14 ohm	cond; IEC 60093
Dielectric Constant	3.3	3.3	dry; IEC 60250
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
	3.5	3.5	dry; IEC 60250
	@Frequency 100 Hz	@Frequency 100 Hz	
	4.5	4.5	cond; IEC 60250
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
Dielectric Strength	14	14	cond; IEC 60250
	@Frequency 100 Hz	@Frequency 100 Hz	
	20.0 kV/mm	508 kV/in	cond; IEC 60243-1
	25.0 kV/mm	635 kV/in	dry; IEC 60243-1
Dissipation Factor	0.0090	0.0090	dry; IEC 60250
	@Frequency 100 Hz	@Frequency 100 Hz	
	0.015	0.015	

Electrical Properties	@Frequency 1.00e+6 Metric Hz	@Frequency 1.00e+6 English Hz	dry: IEC 60250 Comments
	0.12	0.12	cond; IEC 60250
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
	0.30	0.30	cond; IEC 60250
	@Frequency 100 Hz	@Frequency 100 Hz	
Comparative Tracking Index	600 V	600 V	cond; IEC 60112

## Contact Songhan Plastic Technology Co.,Ltd.

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