

DSM Akulon® S223-TP4 Impact Modified Nylon 66 (European Grade) (Cond) (discontinued **)

Categories: [Polymer](#); [Thermoplastic](#); [Nylon \(Polyamide PA\)](#); [Nylon 66 \(PA66\)](#); [Nylon 66, Impact Grade](#)

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.

Vendors: No vendors are listed for this material. Please [click here](#) if you are a supplier and would like information on how to add your listing to this material.

Physical Properties	Metric	English	Comments
Density	1.08 g/cc	0.0390 lb/in ³	(DAM); ISO 1183
Water Absorption	7.2 %	7.2 %	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
Charpy Impact Unnotched 	NB @Temperature -30.0 °C	NB @Temperature -22.0 °F	ISO 179/1eU
	NB @Temperature 23.0 °C	NB @Temperature 73.4 °F	ISO 179/1eU
Charpy Impact, Notched 	2.50 J/cm ² @Temperature -30.0 °C	11.9 ft-lb/in ² @Temperature -22.0 °F	ISO 179/1eA
	8.50 J/cm ² @Temperature 23.0 °C	40.5 ft-lb/in ² @Temperature 73.4 °F	ISO 179/1eA

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+12 ohm-cm	1.00e+12 ohm-cm	IEC 60093
Surface Resistance	1.00e+14 ohm	1.00e+14 ohm	IEC 60093
Dielectric Constant 	4.0 @Frequency 1e+6 Hz	4.0 @Frequency 1e+6 Hz	IEC 60250
	10 @Frequency 100 Hz	10 @Frequency 100 Hz	IEC 60250
Dielectric Strength	20.0 kV/mm	508 kV/in	IEC 60243-1
Dissipation Factor	0.10 @Frequency 1e+6 Hz	0.10 @Frequency 1e+6 Hz	IEC 60250
Comparative Tracking Index	600 V	600 V	IEC 60112

Thermal Properties	Metric	English	Comments
Melting Point	260 °C	500 °F	10°C/min (DAM); ISO 11357-1/-3

Descriptive Properties

High Impact or Impact Modified	Yes
Injection Molding	Yes
Without Fillers	Yes

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Materials flagged as discontinued (🚫) are no longer part of the manufacturer's standard product line according to our latest information. These materials may be available by special order, in distribution inventory, or reinstated as an active product. Data sheets from materials that are no longer available remain in MatWeb to assist users in finding replacement materials.

Users of our Advanced Search (registration required) may exclude discontinued materials from search results.

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