PA66.6 GX

Product Data Sheet

AkuLon® 66.6 GX

Modified Polyamide alloy (P66 + PA6 + UV stabiliser)

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AkuLon 66.6 GX is a copolymer of nylon 66 and 6, combining the impact resistances of PA6 with the higher stiffness of PA66. UV stabilisation makes it suitable for outdoor applications.

Properties	Test method	Unit	Value
Mechanical			
Tensile strength	ISO 527	MPa	86
Elongation at break	ISO 527	%	45
Modulus of elasticity (tensile)	ISO 527	MPa	3100
Modulus of elasticity (flexural)	ISO 178	MPa	2800
Notch impact strength	ISO 179	KJ / m²	5
Flexural strength	ISO 178	MPa	110
Compressive stress 5 % strain	ISO 604	MPa	95
Compressive modulus	ISO 604	MPa	2900
Shore hardness	ISO 868	D	83
Rockwell hardness	ISO 2039	M	88
Ball indentation hardness	ISO 2039	MPa	170
Thermal			
Melting temperature	ISO 3146	°C	240
Glass transition temperature (Tg)	ISO 11357	°C	47
Thermal conductivity	ISO 22007	W / (m * K)	0,26
Coef. of linear thermal expansion	ISO 11359	10^{-4} / K	0,3
Long term service temperature	See note *	°C	-30 → 92
Short term service temperature	See note *	°C	160
Heat deflection temperature	ISO 75 HDT/A	°C	88
Flammability	UL 94	–	HB / V2
Flammability (oxygen index)	ISO 4589	%	27
Electrical			
Dielectric constant at 1MHz	IEC 60250	10^6 Hz	4
Dissipation factor at 1MHz	IEC 60250	10^6 Hz	0,06
Volume resistivity	IEC 60093	Ω * cm	≥ 10^{12}
Surface resistivity	IEC 60093	Ω	≥ 10^{12}
Dielectric strength	IEC 60243	kV / mm	22
Tracking resistance (CTI)	IEC 60112	V	600
Additional Data			
Density	ISO 1183-1	g / cm³	1,14
Water absorption (saturation)	ISO 62	%	8,4
Humidity absorption (saturation)	ISO 62	%	2,6
Food compliance	EEC	–	No
Food compliance	FDA	–	No
Coefficient of Friction (pin-on-disk)	ISO 7148-2	–	0,4
Shapes	Rod (20 → 100 Ø)	–	–
Colour	Black		

- **Copolymer nylon 66.6** exhibits good resistance to crude oil, processed petroleum hydrocarbons, organic solvents and alkalis.

The conditioned material values stated are average test results. The data provides information about our products and offers a guide for material selection. This does not provide an assurance of specific properties or the products suitability for a particular application.

It solely remains the customers responsibility to test and assess the suitability and compatibility of Plastim's products for it's intended applications, processes and uses. The customer undertakes all liability in respect of the application, processing or use of the aforementioned information or product.

* *Long term service temperature are based on the thermal ageing of the polymer by oxidation, resulting in a decrease in mechanical capabilities*

* *Short term service temperature only applies to very low mechanical stress for a very limited time only.*

Properties can vary depending on the raw shape selected and the degree of crystallisation. The actual property values of a finished product may differ from the indicated values stated.