

Ph: +61 2 9609 5090 E: sales@gantiel.com 4 Davis Road, Wetherill Park, NSW 2164 P.O.Box 586 Baulkham Hills NSW 1755 ABN: 87 108 071 512

Gantiel Vensott Engineering Plastic Solutions

## **Product Description**

This black cast grade, produced by an anionic polymerization casting process and carbon fillers, demonstrates similar characteristics to PA 66. Cast materials contain significantly lower stress levels combined with high strength, good creep and wear resistance resulting in great dimensional stability when machining. It offers the possibility of manufacturing large-sized stock shapes as well as custom castings which require only minimal machining. With material being more dimensionally stable comparing to the one of widely used polyolefin, it can be used for a much closer tolerance.

## **Applications**

Lenlon 6GB (Black Cast Nylon)

echnical Data Sheet

Nylon is used for a wide range of industrial components both for Original Equipment Manufacture and maintenance. Some examples: wear pads, support and guide wheels, conveyor rollers, tension rollers, pulleys and pulley linings, cams, hammer heads, scrapers, gear wheels, sprockets, feed screws, star wheels, chopping boards, insulators, bearing slides, roller sleeves, impact blocks, full & segmented gears, outrigger pads, pump seats, gate rollers & support wheels, etc.

## **Other Material Properties**

It combines high strength, stiffness and hardness with good creep and wear resistance, heat ageing properties, very good impact properties and machinability. As well as high tensile strength and high modulus of elasticity.

## Key Features and Benefits

- High Impact Resistance
- Excellent Vibration Resistance
- Good Dimensional Stability
- Good Load Bearing Properties
- Resistance to Brittleness & Deterioration
- Very Good Wear & Abrasion Resistance

All information supplied by or on behalf of Gantiel Vensott Pty. Ltd. In relation to its products, whether in the nature of data, recommendations or otherwise, is supported by research and believed reliable, but Gantiel Vensott Pty. Ltd. assumes no liability whatsoever in respect of application, processing or use made of the aforementioned information or products, or any consequence thereof. The buyer undertakes all liability in respect of the application, processing or use of the aforementioned information or product, whose quality and other properties he shall verify, or any consequence thereof. No liability whatsoever shall attach to Gantiel Vensott Pty. Ltd. For any infringement of the rights owned or controlled by a third party in intellectual, industrial or other property by reason of the application, processing or use of the aforementioned information or products by the buyer.

Properties			
	Value	Unit	ASTM Test Method
Specific Gravity	1.15-1.17	g/cm <sup>3</sup>	D792
Tensile Strength	65-83	Мра	D638
Tensile Elongation	>25	%	D638
Tensile Modulus	3450	Мра	D638
Compressive Strength	14,000 – 16,000	psi	D695
Compressive Modulus	325,000 – 425,000	psi	D695
Flexural Strength	112	Mpa	D790
Flexural Modulus	400,000 – 520,000	psi	D790
Shear Strength	10,000 – 11,000	psi	D732
Notched Izod Impact	>5	kJ/m <sup>2</sup>	D256
Hardness Rockwell	84	М	D785
Hardness, Shore	78 - 86	D	D2240
Melting Point	215-220	0C	D3418
Coeffcient of Linear Thermal Expansion	80-95 x 10 <sup>-6</sup>	m/(m.K)	D696
Deformation Under Load	0.5 – 2.6	%	D621
Deflection Temperature			
264 psi	200 - 300	٥F	D648
66 psi	300 - 400	٥F	D648
Continous Service Temperature	105	0C	-
Intermittent Service Temperature	165	°C	-
Coefficient of Friction, Dynamic	0.20-0.22		D1894
Water Absorption			
24 hours	0.5 - 0.8	%	D570
Saturation	4.0 - 6.7	%	D570
Dielectric Strength	500 – 600	v/mil.	D149
Dielectric Constant			
60 Hz	3.7		D150
1000 Hz	3.7		D150
1 MHz	3.7		D150
Limiting Pressure Velocity*	3600	Psi-ft/min	-

The facts stated and recommendations contained herein are based on experiments and information believed to be reliable. No guarantee is made of the accuracy, however and the products are sold without warranty, expressed or implied, and upon the conditions that purchasers shall conduct tests to determine suitability for their intended use.

\*Note: max P for dynamic bearings is 2,000 psi, max V is 400 fpm