

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

Product Description

During the modification with Vendel MD FG, metal fillings are added to the basic polyoxymethylene, which allows the plastic to be detectable. The excellent machinability, tenacity and dimensional stability of the basic plastic remain. The EU VO 10/2011-/FDA approval assures physiological safety. Vendel MD plastics are used as building parts in the food industry.

Applications

- Automotive Industry
- Electrical Industry
- Mechanical Engineering
- Stirring Staffs
- Medical Technolog
- Plastics Industry
- Machined Components
- Stripper

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.

Physical Properties

	Value	Unit	Verification
Moisture pick-up till saturation (in normal climate 23 °C / 50% r.h.)	-	%	ISO 62
Water absorption till saturation (in water at 23 °C)	<0.1	%	ISO 62

Mechanical Properties

	Value	Unit	Verification
Tensile stress at yield [$v = 50$ mm/min]	52	MPa	ISO 527-2
Tensile stress at break [$v = 5$ mm/min]	48	MPa	ISO 527-2
Nominal percentage elongation at break	16	%	ISO 527-2
Tensile modulus of elasticity	3200	MPa	ISO 527-2
Flexural modulus of elasticity	1900	MPa	ISO 178
Ball indentation hardness (value at 30 sec.)	148	MPa	ISO 2039-1
Rockwell hardness (measured with test pieces 10 mm thk)	-		ISO 2039-2
Charpy impact strength (+23 °C)	60	kJ/m ²	ISO 179/1eU
Charpy impact strength - notched (+23 °C)	-	kJ/m ²	ISO 179/1eA

Electric Properties

	Value	Unit	Verification
Specific insulation resistance [\geq]	-	Ohm · m	IEC 60093
Specific surface resistance [\geq]	10 ²²	Ohm	IEC 60093
Dielectric constant (at 1 MHz)	-	10 ⁶ Hz	IEC 60250
Dielectric constant (at 100 Hz)	-	10 ² Hz	IEC 60250
Dissipation factor (at 1 MHz)	-	10 ⁶ Hz	IEC 60250
Dissipation factor (at 100 Hz)	-	10 ² Hz	IEC 60250
Dielectric strength K20/K20 (in transformer oil)	-	kV/mm	IEC 60243-1
Comparative tracking index (CTI)	-		IEC 60112

Thermal Properties

	Value	Unit	Verification
Temperature for usage in air (max. short term)	120	°C	
Temperature for usage in air (max. lasting)	100	°C	
Minimum service temperature in air	-	°C	
Heat distortion temperature (HDT A process)	105	°C	ISO 75-2
Coefficient of linear expansion (at length, 23 – 60 °C)	-	10 ⁻⁴ /K	ISO 11359
Thermal conductivity (+23 °C)	0.38	W/(K · m)	DIN 52612
Flammability according UL Standard (thickness 3 and 6 mm)	HB	Class	UL 94
Vicat softening temperature (VST/B/50)	155	°C	ISO 306
Melting point (DSC, 10 K/min)	165	°C	ISO 3146