

# MATERIAL DATA SHEET

 LG/ 02.2010  
 EDITION 5

## TARNOFORM® 300 GF5

PROPERTIES	STANDARD	TEST	UNIT	TYPICAL DATA
	ISO	CONDITIONS		
<b>PHYSICAL</b>				
Melting point; DSC	11357-1-3	10°C/min.	°C	167
Density	1183	-	g/cm <sup>3</sup>	1,59
Melt volume-flow rate (MVR)	1133	190°C/2,16kg	cm <sup>3</sup> /10min	3,5
Melt mass-flow rate (MFR)	1133	190°C/2,16kg	g/10min	4
Humidity absorption	62	23°C/50%RH	%	0,17
Water absorption	62	23°C/sat.	%	0,8
Linear shrinkage II / ⊥	294-4	60x60x2	%	0,8 / 1,4
<b>MECHANICAL</b>				
Tensile strength	527-1,-2	5mm/min	MPa	120
Elongation at break	527-1,-2	5mm/min	%	2
Tensile E-modulus	527-1,-2	1mm/min	MPa	9300
Flexural strength	178	2mm/min	MPa	160
Flexural modulus	178	2mm/min	MPa	8300
Charpy impact strength	179-1	1eU	kJ/m <sup>2</sup>	30
Charpy impact strength (-30°C)	179-1	1eU	kJ/m <sup>2</sup>	-
Charpy notched impact strength	179-1	1eA	kJ/m <sup>2</sup>	4,5
Charpy notched impact strength (-30°C)	179-1	1eA	kJ/m <sup>2</sup>	-
Izod notched impact strength	180		kJ/m <sup>2</sup>	5
Ball indentation hardness	2039-1	358 N	MPa	220
<b>THERMAL</b>				
Vicat softening point	306	50N	°C	160
Heat deflection temperature	75-1,-2	1,8 MPa	°C	160
Coefficient of linear thermal expansion II / ⊥	11359-1/-2	23°C - 55°C	E-4/°C	0,4 / 0,8
Temperature index TI	IEC 60216	20000 h 5000 h	°C °C	- -
Limit of temperature, at few hours operation	-	-	°C	100
<b>FLAMMABILITY</b>				
Flammability	UL94	3,2 mm	Class	HB
Burning Rate	US-FMVSS 302	thickness d≥1mm	mm/min	< 100
<b>ELECTRICAL</b>				
Surface resistivity	IEC 60093	-	Ω	10 <sup>13</sup>
Volume resistivity	IEC 60093	-	Ωxcm	10 <sup>14</sup>
Dielectric strength	IEC 60243-1	2mm	kV/mm	25
Dielectric constant	IEC 60250	1MHz	-	4,2
Dissipation factor	IEC 60250	1MHz	-	95E-4
Comparative tracking index CTI	IEC 60112	solution A	V	600
Product nomenclature acc. ISO 9988-1: POM-K, POM-K, M-GNR, 02-003, GF26				

All data for natural and black coloured material (unless indicated otherwise).  
 Properties measured at 23°C (unless indicated otherwise).

## TARNOFORM<sup>®</sup> 300 GF5

<b>CHARACTERISTICS</b>	Tarnoform <sup>®</sup> 300 GF5 there is 26% glass fibres reinforced injection-moulding grade with high strength and stiffness and with reduced shrinkage and coefficient of linear thermal expansion.
<b>APPLICATIONS</b>	For injection-moulding parts and tools requiring increased strength and stiffness. Used for automotive, machine parts, appliances, household articles, electronic, building and furnishes industries, etc.
<b>PROCESSING</b>	<b>Injection moulding:</b> Melt temperature: 180-230°C, Injection pressure: 80-110 MPa, Injection speed: slow - medium, Mould temperature: 80-110°C.
<b>DRYING</b>	Tarnoform <sup>®</sup> 300 GF5 is delivered as ready for processing, without need of drying. If product has been exposed to a damp atmosphere or has been in contact with water, it has to be dried at 100°C to 120°C in circulating air oven for about 2-4 hours. Processing moisture content should be : < 0,10 %.
<b>COLOUR</b>	Standards colours: natural, black, other colours on request.
<b>RECYCLING</b>	Clean, milled, not contained degraded polymer, postproduction wastes could be reused after mixing with fresh plastic. The addition level of milled scraps may reach up to 10%. It is recommended to use pre-dry milled scraps.
<b>PACKAGING</b>	Available in PE bags containing 25 kg of granules and next put to 1000 kg pallets Available in octabins (big-bag containers) containing up to 1000 kg of granules

The above information is based on our present state of knowledge and is intended to provide general information on our product (s) and its application (s). Therefore it should not be construed as a guarantee of specific properties of the product (s) described herein, and/or its suitability for specific application. The quality of the product (s) is guaranteed in our General Conditions of Sale, and/or Sales Confirmation.