

# MATERIAL DATA SHEET

 LG/ 02.2010  
 EDITION 6

## TARNOFORM® 500

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>	1,41
Melt volume-flow rate (MVR)	1133	190°C/2,16kg	cm <sup>3</sup> /10min	23
Melt mass-flow rate (MFR)	1133	190°C/2,16kg	g/10min	27
Humidity absorption	62	23°C/50%RH	%	0,2
Water absorption	62	23°C/sat.	%	0,8
Linear shrinkage II	294-4	60x60x2	%	2,0
<b>MECHANICAL</b>				
Tensile strength at yield	527-1,-2	50mm/min	MPa	63
Elongation at yield	527-1,-2	50mm/min	%	8
Elongation at break	527-1,-2	50mm/min	%	20
Tensile E-modulus	527-1,-2	1mm/min	MPa	2800
Flexural strength	178	2mm/min	MPa	65
Flexural modulus	178	2mm/min	MPa	2550
Charpy impact strength	179-1	1eU	kJ/m <sup>2</sup>	140
Charpy impact strength (-30°C)	179-1	1eU	kJ/m <sup>2</sup>	110
Charpy notched impact strength	179-1	1eA	kJ/m <sup>2</sup>	5,5
Charpy notched impact strength (-30°C)	179-1	1eA	kJ/m <sup>2</sup>	4,5
Izod notched impact strength	180		kJ/m <sup>2</sup>	5,5
Ball indentation hardness	2039-1	358 N	MPa	160
<b>THERMAL</b>				
Vicat softening point	306	50N	°C	150
Heat deflection temperature	75-1,-2	1,8 MPa	°C	115
Coefficient of linear thermal expansion II	11359-1/-2	23°C - 55°C	E-4/°C	1,1
Temperature index TI	IEC 60216	20000 h	°C	-
		5000 h	°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>14</sup>
Volume resistivity	IEC 60093	-	Ωxcm	10 <sup>15</sup>
Dielectric strength	IEC 60243-1	2mm	kV/mm	25
Dielectric constant	IEC 60250	1MHz	-	3,9
Dissipation factor	IEC 60250	1MHz	-	-
Comparative tracking index CTI	IEC 60112	solution A	V	600
Product nomenclature acc. ISO 9988-1: POM-K, M-GNR, 05-002				

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

## TARNOFORM<sup>®</sup> 500

<b>CHARACTERISTICS</b>	Tarnoform <sup>®</sup> 500 - is the very easy flowing, fast cycling injection-moulding standard grade, good chemical resistance, exhibit low mould deposit.
<b>APPLICATIONS</b>	Destined for injection moulding for production of thin-walled parts or in case of long flow path.
<b>PROCESSING</b>	Melt temperature: 170-230°C, Injection pressure: 60-120 MPa, Injection speed: slow - medium, Mould temperature: 60-120°C, optimum about 90°C, for precision components up to 120°C
<b>DRYING</b>	Tarnoform <sup>®</sup> 500 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.