MATERIAL DATA SHEET

DK/ 02.2010
EDITION 4

TARNAMID® T-27 GF15

PROPERTIES	STANDARD ISO	TEST CONDITIONS	UNIT	TYPICAL DATA	
PHYSICAL					
Melting point; DSC	11357-1-3	10°C/min.	°C	221	
Density	1183		g/cm^3	1,22	
Melt volume-flow rate (MVR)	1133	275°C/5kg	cm^3/10min	60	
Humidity absorption	62	23°C/50%RH	%	2,7	
Water absorption	62	23°C/sat.	%	8,3	
Linear shrinkage II/⊥	294-4	60x60x2	%	0,4/1,2	
MECHANICAL					
Tensile strength	527-1,-2	5mm/min	MPa	130	70
Elongation at break	527-1,-2	5mm/min	%	4	14
Tensile E-modulus	527-1,-2	1mm/min	MPa	5700	3500
Flexural strength	178	2mm/min	MPa	180	110
Flexural modulus	178	2mm/min	MPa	5000	4000
Charpy impact strength	179-1	1eU	kJ/m^2	50	100
Charpy impact strength (-30°C)	179-1	1eU	kJ/m^2	45	-
Charpy notched impact strength	179-1	1eA	kJ/m^2	6	15
Charpy notched impact strength (-30°C)	179-1	1eA	kJ/m^2	5	-
Izod notched impact strength	180		kJ/m^2	7	18
Ball indentation hardness	2039-1	358 N	MPa	185	130
THERMAL					
Vicat softening point	306	50N	°C	215	200
Heat deflection temperature	75-1,-2	1,8 MPa	°C	195	190
Coefficient of linear thermal expansion II/⊥	11359-1/-2	23°C - 55°C	E-4/°C	0,3/1,3	
Temperature index TI	IEC 60216	20000 h 5000 h	°C °C	110 120	
Limit of temperature, at few hours operation	-	-	°C	180	
FLAMMABILITY					
Flammability horizontal/vertical*	UL94	3,2 mm	Class	94HB/-	
		1,6 mm		-	
Glow Wire Flammability Index (GWFI)	IEC-60695-2-12	2 mm	°C	550	
Burning Rate	US-FMVSS 302	d=1	mm/min	+	
ELECTRICAL					
Surface resistivity	IEC 60093	-	Ω	10^{15}	10^{11}
Volume resistivity	IEC 60093	-	Ωxcm	10^{15}	10^{12}
Dielectric strength	IEC 60243-1	2mm	kV/mm	31	27
Dielectric constant	IEC 60250	1MHz	-	3,7	4,7
Dissipation factor	IEC 60250	1MHz	-	160	1300
Comparative tracking index CTI	IEC 60112	solution A	V	525	525
Product nomenclature acc. ISO 1874: PA6, MHR, 14-040, GF15					

Dry– dry as moulded, moisture content not more then 0,2%
Conditioned – moist after conditioning in standard atmosphere 23°C/50% until saturated
Mechanical properties measured at 23°C unless otherwise stated.

AZOTY TARNOW

TARNAMID®

POLYAMIDE 6

TARNAMID® T-27 GF15

CHARACTERISTICS

It is 15% glass fibre reinforced polyamide 6 compound, heat stabilised.

APLICATIONS

Destined for injection moulding for production of parts required high mechanical strength, used in automotive, electronic machine parts, appliances, household articles, building and furnishes industries, etc.

PROCESSING

Melt temperature: 240-260°C,
Injection pressure: 80-110 MPa,
Injection speed: mediun
Mould temperature: 80 -100°C

DRYING

Tarnamid T-27 GF15 is delivered as ready for processing, without need of drying.
If drying necessary there is recommended to use dehumidifier dryer and temperature should not exceed 80°C. Processing moisture content should be : < 0,10 %,

COLOUR

Standard colours: natural and black, other colours on request.

RECYCLING

Clean milled post production wastes could be recycled after mixing with fresh plastic. The amount of milled plastic added to natural plastic is controlled depending on final product quality requirements, it may reach up to 10 %. Final product properties depend rather more on quality of recycled or milled polyamide then on its share. Attention shall be paid not to use milled scraps having more than 0,2 % of water

PACKAGING

in ALU/PE bags containing 25 kg of granules and next put to 1000 kg pallets
in octabins (big-bag containers) containing 1000 kg of granules
directly to tanks or containers

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