

## TECHNYL® 1021ST

Product Data Sheet - January 2011

#### **Description**

Polyamide 6, unfilled, super tough impact modified, for injection moulding

#### **Applications**

TECHNYL® 1021ST has the highest level impact strength and balanced mechanical properties. It is suitable for all sectors industries such as,

- Bowling pin, Brake drum, Inline skate part

This product is available natural color and in colours on request.

#### **Processing**

The material is supplied in airtight bags, ready for use. In the case that the virgin material has absorbed moisture, it must be dried to a final moisture content less than 0.2% with a dehumidified air drying equipment at approx. 80°C

Recommended moulding conditions:

-Barrel temperatures : - feed zone 235 - 240°C

- compression zone 245 - 250°C - front zone 250 - 260°C

-Mould temperatures 60 - 80°C

For more detailed information, please refer to the technical shet " Injection moulding ".

#### Safety

Please ref to the Material Safety Data Sheet for TECHNYL® 1021ST



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\* The values of properties are for natural color grade.

Characteristics	Tets method	Unit	Test result	
			d.a.m*.	Cond.**
Physical				
Moisture adsorption, 24h in water at 23°C	ISO 62	%	1.20	-
Density	ISO 1183	g/cm³	1.06	-
Mold shrinkage (longitudinal)	RHODIA-EP	%	-	-
Mold shrinkage (transverse)	RHODIA-EP	%	-	-
Mechanical				
Tensile strength at yield	ASTM D638	MPa	50	-
Elongation at break	ASTM D638	%	200	-
Flexural stress at break	ASTM D790	MPa	65	-
Flexural modulus	ASTM D790	MPa	1900	-
Izod notched impact strength	ASTM D256	J/m	1100	-
Rockwell hardness	ASTM D786	R-Scale	110	-
Flammable				
UL94 Flammability	ISO 1210 / UL 94	-	НВ	-
Thermal				
Melt Temperature	ISO 11357	$^{\circ}$ C	222	-
Heat Deflection Temperature 1.82 MPa	ASTM D648	$^{\circ}$	50	-
Heat Deflection Temperature 0.45 MPa	ASTM D648	${\mathbb C}$	120	-
Electrical				
Relative permitivity	IEC60250	-	3.5	4
Dissipation factor 1MHz	IEC60250	-	0.02	0.12
Volume resistivity	IEC60093	Ohm.cm	10E14	10E10
Surface resistivity	IEC60093	Ohm	10E12	10E10
Dielectric strength	IEC 60243	kV/m	-	18
Comparative tracking index sol. A	IEC60112	Volt	600	-

#### Specific

#### Identification code >PA6<

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<sup>\*</sup> d.a.m = Dry As Moulded.

<sup>\*\*</sup> Cond. = conditioned according ISO 1110.