LATIGLOSS 66 H2 G/50 NAT.:0003F2

Product for glossy surface parts based on Polyamide 66 (PA 66).

Heat stabilised. Glass fibres.

PHYSICAL PROPERTIES – Typical values	STANDARDS	SI UNITS	
Density	ISO 1183	1.57	g/cm³
Linear shrinkage at moulding – 2.0 mm th. (at 60 MPa of cavity pressure)			
Longitudinal	ISO 294–4	0.30 ÷ 0.60	%
Transversal	ISO 294–4	0.65 ÷ 0.95	%
MECHANICAL PROPERTIES – Typical values			
IZOD impact strength (sample 63.5x12.7x3.2 mm)			
Notched, at +23°C	ASTM D256–A	145	J/m
CHARPY impact strength (sample 80x10x4 mm)			
Unnotched, at +23°C	ISO 179–1eU	80	kJ/m²
Notched, at +23°C	ISO 179–1eA	12	kJ/m²
Tensile elongation (speed 5 mm/min)			
At break	ISO 527 (1)	2.6	%
Tensile strength (speed 5 mm/min)			
At break	ISO 527 (1)	230	MPa
Elastic modulus			
Tensile (speed 1 mm/min)	ISO 527 (1)	16000	MPa
THERMAL PROPERTIES – Typical values			
VICAT – Softening point			
49 N (heating rate 50°C/h)	ISO 306	252	°C
HDT – Heat Deflection Temperature			
0.45 MN/m²	ISO 75	255	°C
1.81 MN/m²	ISO 75	234	°C

NOTES

Specimens were obtained from representitive samples of the above described material.

Specimens moulded by injection in accurately controlled conditions are then conditioned according to the practice ASTM D618 – procedure A (40hrs/23°C/50%R.H.).

The above listed properties may be subjected to variations and therefore cannot be adopted as specifications.

Customer should always make sure of having the most recent copy of the publication.

In addition, the same properties may be influenced by several factors, like moulding techniques used and the size and the shape of the moulded part. Therefore, the contents of this publication does not imply that all the moulded parts will have the same properties as indicated in the data sheet itself.

Customer should always check the property values on the moulded parts.

The material has not to be considered suitable for specific applications in medical sector.

The suitability for food and/or water contact should be verified on the part according to the specific directives.

LATIGLOSS 66 H2 G/50 NAT.:0003F2

Product for glossy surface parts based on Polyamide 66 (PA 66).

Heat stabilised. Glass fibres.

PREDRYING CONDITIONS	At least 3 hours at 90 ÷ 100 °C

These are the suggested conditions to reduce the moisture content to adequate levels.
Temperature and drying time are reduced when using vacuum ovens.
A particularly wet material may need longer drying time.

ACTUAL MELT TEMPERATURE	280 ÷ 320 °C

The injection machine settings needed to obtain the suggested melt temperature will depend greatly on shot
size and machine capacity, as well as other molding parameters such as: injection speed, screw RPM,
back pressure, etc.
On small machines, running short cycles, it is possible to use higher melt temperatures to improve
plastification, fluidity and surface appearance, paying attention to any indication of material degradation.

MOULD TEMPERATURE	90 ÷ 120 °C

The mold temperature suggested above is the actual steel temperature. This can be significantly different from the
tool settings, due to the cooling system efficiency and the accuracy of the temperature control on the tool.

INJECTION SPEED	Medium

The advisable injection speed greatly depends on cavity geometry and injection machine size. The use of high
injection speed can improve the surface appearance, but it can also cause outgassing and burn
marks due to overheating through shear stress.

REGRIND USAGE

The use of regrind is possible, but should be assessed on the basis of the project, moulding parameters, and
type of grinding. The effect of using regrind on material properties must be evaluated by the customer on its
specific project and process.
High percentages of regrind can cause a reduction in viscosity and fibre length, reducing mechanical
properties.

HOT RUNNER MOULDS

Hot runner moulds can be used when a very tight temperature control is assured.

TO AVOID

Shut-off nozzles and internally heated hot runners have to be avoided.
In order to prevent any material degradation, over-dimensioned machines should be avoided.