

Technical information

preliminary

TEREZ[®] GT3 300 H G30 TF15

PA66 blend with partially aromatic content, 30% glass fiber reinforcement and PTFE modification.



TECHNICAL DATA SHEET

Product text

For molded parts with high demands on strength and tribology.

Preliminary data

Properties	Value	Unit	Test method
Density	1,4200	g/cm ³	ISO 1183
Impact strength Charpy (Notched 23°C), dry	12	kJ/m ²	ISO 179
Impact strength Charpy (Notched 23°), conditioned	13	kJ/m ²	ISO 179
Impact strength Charpy 23°C, dry	85	kJ/m ²	ISO 179
Impact strength Charpy (23°), conditioned	NB	kJ/m ²	ISO 179
Tensile-modulus, dry	10500	MPa	ISO 527
Tensile-modulus, conditioned	10000	MPa	ISO 527
Tensile stress at break, dry	215	MPa	ISO 527
Tensile stress at break, conditioned	200	MPa	ISO 527
Elongation at break, dry	4,00	%	ISO 527
Elongation at break, conditioned	5,00	%	ISO 527
HDT 0,45 MPa	245	°C	ISO 75
HDT 1,80 MPa	235	°C	ISO 75
Melting point	260	°C	ISO 11357-3
CTI	600	V	IEC 60112
Surface resistivity, dry	1E13	Ohm	IEC 60093
Volume resistivity, dry	1E12	Ohm * m	IEC 60093
Electric strength	33,00	kV/mm	IEC 60243-1
Burning Behav. at thickness h	HB	class	UL 94
Thickness tested	1,6	mm	UL 94
UL recognition	-		UL 94
Water absorption	4,50	%	ISO 62
Moisture absorption	1,60	%	ISO 62

PROCESSING DATA SHEET

Processing guidelines for injection molding of TEREZ GT3 300 H G30 TF15

The processing data sheet provides guidelines about processing as well as pre-drying.

MATERIAL PREPARATION

Storage

Store in a dry place protected from direct sunlight. Avoid all sources of ignition like extreme heat, sparks, or open flame.

Drying

For the manufacturing of mechanically and optically optimal injection molding parts, we recommend following pre-drying conditions according to the table below. If the container is open (wet granules), the drying time can be extended accordingly.

Dry air dryer

Temperature	80°C
Time	4 - 8 hours
Due point	-40°C

Residual moisture

<= 0.05% (recommended)
max. 0.1% (standard)

MACHINE REQUIREMENTS

PROCESSING

Basic settings

The following basic settings are generally to be selected:

Temperatures

Processing temperatures

Hopper	60 - 80°C
Center	270 - 290°C
Nozzle	270 - 300°C

Mold temperature

Temp.	80 - 120°C
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Residence time

You should try to keep the residence time short, especially at high temperatures to avoid material degradation.

Residence times in the cylinder

max. 275 °C / 8 min.

Instructions for cleaning

Machine parts / units / nozzles, etc., which are still contaminated with larger amounts of PTFE-containing material may not be burned out. It is recommended that machines and aggregates should be purged after processing with pure polyamide or with suitable cleaning granules. An alternative would be a mechanical cleaning of the metal parts.