



Product Information

TORZEN™ G3000HR BK34 PA66 Resin

Product Description

TORZEN™ G3000HR BK34 is a 30% glass reinforced, heat stabilized, black, PA66 resin suitable for hydrolysis resistant applications as well as many injection molding applications where high tensile strength and dimensional stability are needed.

Properties (dry)		Value	Units	Method
Physical	Density	1.37	g/cm ³	ISO 1183
	Glass Fiber Content	30	%	ISO 3451/4
	Mold Shrinkage, 2.0 mm, Normal	0.95 – 1.05	%	ISO 294-4
	Mold Shrinkage, 2.0 mm, Parallel	0.30 – 0.40	%	ISO 294-4
	Water Absorption - 24 hours	1.2	%	ISO 62
	Water Absorption - Equilibrium @ 50% RH	1.8	%	ISO 62
Mechanical	Tensile Strength at Break	195	MPa	ISO 527
	Elongation at Break	3.1	%	ISO 527
	Tensile Modulus	9,800	MPa	ISO 527
	Flexural Modulus	9,100	MPa	ISO 178
	Flexural Strength	270	MPa	ISO 178
	Notched Charpy at 23°C	10	kJ/m ²	ISO 179
	Notched Charpy at -40°C	9	kJ/m ²	ISO 179
	Notched Izod at 23°C	10	kJ/m ²	ISO 180
Thermal	Melting Temperature, 10°C/min	262	°C	ISO 11357
	HDT at 0.45 MPa	255	°C	ISO 75
	HDT at 1.82 MPa	248	°C	ISO 75

General Information

Material Status

Commercial: Active

Availability

North America, South America, Europe, Asia

Features

Glass reinforced, heat stabilized, good machine feed and mold release

RoHS

No intentional additives or ingredients used in TORZEN™ G3000HR BK34 PA66 resin are among those in the European directive 2002/95/EC, (RoHS) as amended.

Process Guidelines for Molding

Drying Temperature	80 °C
Drying Time*	3 - 4 hours
Barrel Temperatures	
Rear	250 - 270 °C
Middle	270 - 290 °C
Front	270 - 290 °C
Nozzle	270 - 290 °C
Processing Temperature (melt)	280 - 300 °C
Mold Temperature	50 - 90 °C
Back Pressure**	2 - 10 bar
Vent Depth	0.007 - 0.04 mm
Cushion (range)	4 - 6 mm
Suggested Moisture (max)	0.18 wt%
Suggested Moisture (min)	0.08 wt%
Screw Speed	Low rpm

* Initial moisture below 0.25 wt%. Use dehumidified air.

** Melt pressure

INVISTA Engineering Polymers

Additional Information:

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