

# Product Information TORZEN<sup>™</sup> G3300HSL NC01 PA66 Resin

## **Product Description**

TORZEN<sup>m</sup> G3300HSL NC01 is a 33% glass reinforced, heat stabilized, natural, PA66 resin suitable for many injection molding applications where high tensile strength and dimensional stability are needed.

Properties (dry)		Value	Units	Method
Physical	Density	1.41	g/cm <sup>3</sup>	ISO 1183
	Glass Fiber Content	33	%	ISO 3451/4
	Mold Shrinkage, 2.0 mm, Normal	0.90 - 1.10	%	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	205	MPa	ISO 527
	Elongation at Break	3.1	%	ISO 527
	Tensile Modulus	10,500	MPa	ISO 527
	Flexural Modulus	9,500	MPa	ISO 178
	Flexural Strength	285	MPa	ISO 178
Σ	Notched Charpy at 23°C	12	kJ/m²	ISO 179
	Notched Charpy at -40°C	10	kJ/m²	ISO 179
	Notched Izod at 23°C	12	kJ/m²	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, Asia

#### Features

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

#### RoHS

No intentional additives or ingredients used in TORZEN<sup>™</sup> G3300HSL NC01 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

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