

# Product Information TORZEN<sup>™</sup> T3000HSL NC01 PA66 Resin

## **Product Description**

TORZEN<sup>m</sup> T3000HSL NC01 is a highly toughened, heat stabilized, natural PA66 resin with good impact strength, stiffness, weld line strength, surface appearance and flow.

Properties (dry)		Value	Units	Method
Physical	Specific Gravity	1.07	g/cm <sup>3</sup>	ISO 1183
	Mold Shrinkage, 2.0 mm, Normal	1.6 – 1.9	%	ISO 294-4
	Mold Shrinkage, 2.0 mm, Parallel	1.7 – 2.0	%	ISO 294-4
Mechanical	Tensile Strength at Yield	47	MPa	ISO 527
	Elongation at Yield	4.5	%	ISO 527
	Elongation at Break	50	MPa	ISO 527
	Flexural Modulus	1,900	MPa	ISO 178
	Notched Charpy at 23°C	82	kJ/m²	ISO 179
	Notched Charpy at -40°C	19	kJ/m²	ISO 179
	Unnotched Charpy at 23°C	NB	kJ/m²	ISO 179
	Unnotched Charpy at -30°C	NB	kJ/m²	ISO 179
	Notched Izod at -30°C	17	kJ/m²	ISO 180
Thermal	Melting Temperature, 10°C/min	262	°C	ISO 11357
	HDT at 0.45 MPa	148	°C	ISO 75
	HDT at 1.82 MPa	61	°C	ISO 75
	CLTE, 2.0 mm, Parallel, 23 - 55 °C	1.4	10 <sup>-4</sup> /°C	ISO 11359
	CLTE, 2.0 mm, Normal, 23 - 55 °C	1.2	10 <sup>-4</sup> /°C	ISO 11359

# **General Information**

Material Status

Commercial: Active

### Availability

North America, South America, Europe, Asia

## Features

Impact modified, heat stabilized, high flow

#### RoHS

No intentional additives or ingredients used in TORZEN<sup>™</sup> T3000HSL 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	

 $\ast$  Initial moisture below 0.25 wt%. Use dehumidified air.

\*\* Melt pressure

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