



## Product Information

# TORZEN™ T3000HSL BK20 PA66 Resin

### Product Description

TORZEN™ T3000HSL BK20 is a highly toughened, heat stabilized, black 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/m <sup>2</sup>	ISO 179
	Notched Charpy at -40°C	19	kJ/m <sup>2</sup>	ISO 179
	Unnotched Charpy at 23°C	NB	kJ/m <sup>2</sup>	ISO 179
	Unnotched Charpy at -30°C	NB	kJ/m <sup>2</sup>	ISO 179
Thermal	Notched Izod at -30°C	17	kJ/m <sup>2</sup>	ISO 180
	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™ T3000HSL BK20 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 Business Additional Information:

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