Product Information

TORZEN® U4830HSL NC01 PA66 Resin

Properties (dry)		Value	Units	Method
Physical	Density	1.14	g/cm^3	ISO 1183
	Mold Shrinkage, 2.0 mm, Parallel	1.9	%	ISO 294-4
	Mold Shrinkage, 2.0 mm, Transverse	1.8	%	ISO 294-4
	Water Absorption - 24 hours	1.4	%	ISO 62
	Water Absorption - Equilibrium @ 50% RH		%	ISO 62
Mechanical	Tensile Strength at Yield (50 mm/min)	84	MPa	ISO 527
	Tensile Strength at Break	-	MPa	ISO 527
	Elongation at Yield	4.2	%	ISO 527
	Elongation at Break	30	%	ISO 527
	Tensile Modulus (1 mm/min)	3200	MPa	ISO 527
	Flexural Modulus	2900	MPa	ISO 178
	Flexural Strength	98	MPa	ISO 178
	Notched Charpy at 23°C	6.0	kJ/m^2	ISO 179
	Notched Charpy at -30°C	4.6	kJ/m^2	ISO 179
	Unnotched Charpy at 23°C	NB	kJ/m^2	ISO 179
	Unnotched Charpy at -30°C	350	kJ/m^2	ISO 179
	Notched Izod at 23°C	4.8	kJ/m^2	ISO 180
Thermal	Melting Temperature, 10°C/min	261	°C	ISO 11357
	HDT at 0.45 MPa	199	°C	ISO 75
	HDT at 1.82 MPa	64	°C	ISO 75
	CLTE, 2.0 mm, Parallel, 23 - 55 °C		10^{-4}/°C	ASTM E831
	CLTE, 2.0 mm, Transverse, 23 - 55 °C		10^{-4}/°C	ASTM E831
Electrical	Surface Resistivity		ohms	IEC 60093
	Volume Resistivity, 2.0 mm	10	ohm-cm	IEC 60093
	Dielectric Strength, 1.0 mm	18	kV/mm	IEC 60243
	Comparative Tracking Index, 3.0 mm	600	volts	IEC 60112
Flammability	Flammability Classification (0.40 mm)	V-2	—	UL 94
	Glow Wire Flammability Index (0.71 mm)	960	°C	IEC 60695-2-12
	Glow Wire Flammability Index (1.5 mm)	960	°C	IEC 60695-2-12
	Glow Wire Flammability Index (3.0 mm)	960	°C	IEC 60695-2-12
	Glow Wire Ignition Temperature (0.71 mm)	960	°C	IEC 60695-2-13
	Glow Wire Ignition Temperature (1.5 mm)	960	°C	IEC 60695-2-13
	Glow Wire Ignition Temperature (3.0 mm)	750	°C	IEC 60695-2-13

Product Description

TORZEN® U4830HSL NC01 is a heat-stabilized, lubricated molding grade PA66 in natural color. The heat stabilizer system has been designed to provide excellent property retention in high temperature applications. U4830HSL is also available in black.

General Information

Material Status

Commercial: Active

Availability

North America, South America, Europe, Asia

Features

Good property retention at elevated temperatures and excellent processability

RoHS

No intentional additives or ingredients used in TORZEN® U4830HSL NC01 are among those in the European directive 2011/65/EC (RoHs2), 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	75 - 180 rpm

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

** Melt pressure

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