

PA66 U4800

Product Description

U4800 is a general purpose, natural PA66 resin suitable for compounding, injection molding, and extrusion applications where ease of processing, good color and physical property retention are desired.

Properties (dry)		Value	Units	Method
Physical	Density	1.14	g/cm ³	ISO 1183
	Mold Shrinkage, 2.0 mm, Parallel	1.4	%	ISO 294-4
	Mold Shrinkage, 2.0 mm, Transverse	1.5	%	ISO 294-4
	Water Absorption - 24 hours		%	ISO 62
	Water Absorption - Equilibrium @ 50% RH		%	ISO 62
Mechanical	Tensile Strength at Yield (50 mm/min)	82	MPa	ISO 527
	Tensile Strength at Break		MPa	ISO 527
	Elongation at Yield	4.4	%	ISO 527
	Elongation at Break	50	%	ISO 527
	Tensile Modulus (1 mm/min)	2800	MPa	ISO 527
	Flexural Modulus	2800	MPa	ISO 178
	Flexural Strength	94	MPa	ISO 178
	Notched Charpy at 23 °C	4.6	kJ/m ²	ISO 179
	Notched Charpy at -30 °C	3.9	kJ/m ²	ISO 179
	Unnotched Charpy at 23 °C	NB	kJ/m ²	ISO 179
	Unnotched Charpy at -30 °C	NB	kJ/m ²	ISO 179
	Notched Izod at 23 °C	5.0	kJ/m ²	ISO 180
Thermal	Melting Temperature, 10 °C/min	261	°C	ISO 11357
	HDT at 0.45 MPa	193	°C	ISO 75
	HDT at 1.82 MPa	66	°C	ISO 75
	CLTE, 2.0 mm, Parallel, 23 - 55 °C		10 ⁻⁴ /°C	ISO 11359
	CLTE, 2.0 mm, Normal, 23 - 55 °C		10 ⁻⁴ /°C	ISO 11359
Electrical	Surface Resistivity		ohms	IEC 60093
	Volume Resistivity, 3.0 mm		ohm-cm	IEC 60093
	Dielectric Strength (step-by-step), 3.0 mm		kV/mm	IEC 60243
	Comparative Tracking Index, 3.0 mm		volts	IEC 60112
Flammability	Flammability Classification (0.71 mm)			UL 94
	Glow Wire Flammability Index (0.71 mm)		°C	IEC 60695-2-12
	Glow Wire Flammability Index (1.5 mm)		°C	IEC 60695-2-12
	Glow Wire Flammability Index (3.0 mm)		°C	IEC 60695-2-12
	Glow Wire Ignition Temperature (0.71 mm)		°C	IEC 60695-2-12
	Glow Wire Ignition Temperature (1.5 mm)		°C	IEC 60695-2-12
	Glow Wire Ignition Temperature (3.0 mm)		°C	IEC 60695-2-12

General Information

Material Status

Commercial: Active

Availability

North America, South America, Europe, Asia

Features

Good color retention and processability

RoHS

RoHS Compliant

Process Guidelines for Molding

Drying Temperature 80 °C

Drying Time* 16 - 20 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 0.5 wt%. Use dehumidified air.

** Melt pressure

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Additional Information:

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