



Ultramid® A3W Q601

BASF Corporation - Polyamide 66

Monday, November 4, 2019

General Information

Product Description

Ultramid A3W Q601 is an easy flowing, heat aging resistant injection molding PA66 grade for fast processing.

Applications

Typical applications include highly stressed parts such as bearings, bearing cages, gear-wheels, coil formers and cable connectors.

General

Material Status	• Commercial: Active
Availability	• North America
Features	• Fast Molding Cycle • Good Flow • Heat Aging Resistant • Oil Resistant
Uses	• Bearings • Connectors • Gears
Agency Ratings	• EC 1907/2006 (REACH)
RoHS Compliance	• RoHS Compliant
Automotive Specifications	• FORD WSK-M4D648-A • FORD WSS-M4D648-B1 • FORD WSS-M4D648-B2
Forms	• Pellets
Processing Method	• Injection Molding

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.14	g/cm ³	ISO 1183
Water Absorption (Saturation, 73°F)	8.5	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	2.8	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (73°F)	435000	psi	ISO 527-2
Tensile Stress (Yield, 73°F)	12000	psi	ISO 527-2
Tensile Strain (Yield, 73°F)	4.6	%	ISO 527-2
Flexural Modulus (73°F)	426000	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	2.4	ft·lb/in ²	ISO 179
Notched Izod Impact Strength (73°F)	2.6	ft·lb/in ²	ISO 180
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (264 psi, Unannealed)	158	°F	ISO 75-2/A
Melting Temperature (DSC)	500	°F	ISO 3146

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	176	°F
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	0.20	%
Processing (Melt) Temp	536 to 572	°F
Mold Temperature	104 to 176	°F
Injection Pressure	508 to 1810	psi
Injection Rate	Fast	

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Notes

¹ Typical properties: these are not to be construed as specifications.