



Ultramid® A3Z HP UV

BASF Corporation - Polyamide 66

Monday, November 4, 2019

General Information

Product Description

Ultramid A3Z HP UV is an impact modified PA66 containing heat and ultraviolet light stabilizers. Designed for maximum toughness at low temperatures, Ultramid A3Z HP UV offers a unique combination of impact performance and excellent processability.

General

Material Status	• Commercial: Active		
Availability	• North America		
Additive	• Heat Stabilizer	• Impact Modifier	• UV Stabilizer
Features	• Excellent Processability • Good Impact Resistance • Heat Stabilized	• Impact Modified • Low Temperature Toughness • Oil Resistant	• UV Stabilized
Agency Ratings	• EC 1907/2006 (REACH)		
RoHS Compliance	• RoHS Compliant		
Automotive Specifications	• FORD WSK-M4D666-A • FORD WSS-M4D666-A2	• GM GMP.PA66.074 Color: Natural • GM GMP.PA66.078 Color: Natural	• GM GMW16558P-PA66-T2 Color: Natural
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.07	g/cm ³	ISO 1183
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (73°F)	261000	psi	ISO 527-2
Tensile Stress (Yield, 73°F)	6820	psi	ISO 527-2
Nominal Tensile Strain at Break (73°F)	66	%	ISO 527-2
Flexural Modulus (73°F)	257000	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179
-22°F	9.5	ft·lb/in ²	
73°F	40	ft·lb/in ²	
Charpy Unnotched Impact Strength (73°F)	130	ft·lb/in ²	ISO 179
Notched Izod Impact Strength			ISO 180
-40°F	10	ft·lb/in ²	
73°F	38	ft·lb/in ²	
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (264 psi, Unannealed)	142	°F	ISO 75-2/A
Melting Temperature (DSC)	500	°F	ISO 3146

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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 579	°F
Mold Temperature	140 to 212	°F
Injection Pressure	508 to 1810	psi
Back Pressure	0.00 to 50.8	psi
Screw Speed	40 to 80	rpm
Screw Compression Ratio	3.0:1.0 to 4.0:1.0	

Notes

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