

Ultramid® A3K FC R01

BASF Corporation - Polyamide 66

Monday, November 4, 2019

General Information

Product Description

Ultramid A3K FC R01 is an easy flowing, injection molding grade PA66.

Intended for food contact applications

General		
Material Status	Commercial: Active	
Availability	North America	
Features	Food Contact Acceptable Good Flow	
Uses	Non-specific Food Applications	
Agency Ratings	• EC 1907/2006 (REACH)	
RoHS Compliance	RoHS Compliant	
Forms	• Pellets	
Processing Method	Injection Molding	

ASTM & ISO Properties ¹				
Physical	Nominal Value	Unit	Test Method	
Density	1.13	g/cm³	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)	12300	psi	ISO 527-2	
Tensile Strain (Yield, 73°F)	5.0	%	ISO 527-2	
Nominal Tensile Strain at Break (73°F)	20	%	ISO 527-2	
Flexural Modulus (73°F)	421000	psi	ISO 178	
Flexural Stress (73°F)	14500	psi	ISO 178	
Impact	Nominal Value	Unit	Test Method	
Charpy Notched Impact Strength (73°F)	2.4	ft·lb/in²	ISO 179	
Charpy Unnotched Impact Strength			ISO 179	
-22°F	No Break			
73°F	No Break			
Notched Izod Impact Strength (73°F)	2.6	ft·lb/in²	ISO 180	
Thermal	Nominal Value	Unit	Test Method	
Heat Deflection Temperature (264 psi, Unannealed)	167	°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	



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Injection	Nominal Value Unit
Injection Pressure	508 to 1810 psi
Injection Rate	Fast

Notes



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