Ultramid® T KR 4365 G5

BASF Corporation - Polyamide 6/6T Copolymer

Monday, November 4, 2019

General Information

Product Description

Ultramid T KR 4365 G5 is a 25% glass fiber reinforced, flame-retardant, injection molding PA6/6T grade. Good mechanical properties, high tracking resistance, low tendency for deposits on electrical contacts, very resistant to electrolytic corrosion, resistant to solder baths; electroplateable. Flame retardant based on red phosphorus.

General			
Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Filler / Reinforcement	• Glass Fiber, 25% Filler by Weight		
Additive	• Flame Retardant [Red phosphorus]		
Features	• Copolymer • Corrosion Resistant	• Flame Retardant • Tracking Resistant	
Agency Ratings	• EC 1907/2006 (REACH)		
RoHS Compliance	• RoHS Compliant		
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties [1]

Physical	Dry	Conditioned	Unit	Test Method
Density	1.38	--	g/cm³	ISO 1183
Water Absorption				ISO 62
Saturation, 73°F	5.5	--	%	
Water Absorption				ISO 62
Equilibrium, 73°F, 50% RH	1.3	--	%	
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus (73°F)	1.20E+6	1.16E+6	psi	ISO 527-2
Tensile Stress				ISO 527-2
Break, -40°F	27800	25700	psi	
Break, 73°F	21800	20300	psi	
Break, 176°F	13900	--	psi	
Tensile Strain				ISO 527-2
Break, -40°F	2.9	2.6	%	
Break, 73°F	3.0	3.0	%	
Break, 176°F	2.5	--	%	
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179
-22°F	3.3	--	ft·lb/in²	
73°F	6.2	--	ft·lb/in²	
Charpy Unnotched Impact Strength				ISO 179
-22°F	38	--	ft·lb/in²	
73°F	36	--	ft·lb/in²	
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Heat Deflection Temperature				ISO 75-2/A
264 psi, Unannealed	428	--	°F	

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Thermal	Dry	Conditioned	Unit	Test Method
Melting Temperature (DSC)	563	--	°F	ISO 3146
CLTE - Flow	1.4E-5	--	in/in/°F	
CLTE - Transverse	3.1E-5	--	in/in/°F	
RTI Elec				UL 746
0.030 in	284	--	°F	
0.06 in	284	--	°F	
0.12 in	284	--	°F	
RTI Imp				UL 746
0.030 in	212	--	°F	
0.06 in	221	--	°F	
0.12 in	230	--	°F	
RTI Str				UL 746
0.030 in	248	--	°F	
0.06 in	266	--	°F	
0.12 in	284	--	°F	
Electrical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Volume Resistivity	1.0E+15	--	ohms·cm	IEC 60093
Dielectric Constant (1 MHz)	4.00	--		IEC 60250
Dissipation Factor (1 MHz)	0.020	--		IEC 60250
Comparative Tracking Index	600	600	V	IEC 60112
Flammability	**Dry**	**Conditioned**	**Unit**	**Test Method**
Flame Rating				UL 94
0.015 in	V-2	--		
0.030 in	V-0	--		
0.12 in	V-0	--		
0.06 in	5VA	--		

Notes

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