

Product Information

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Ultramid® T KR 4357 G6 Polyamide 6/6T Copolymer


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Product Description

Ultramid T KR 4357 is a 30% glass fiber reinforced, impact-modified, injection-molding PA6/6T grade. High toughness, stiffness and strength, low water absorption. High melting point (295 C). After the material has been conditioned, its mechanical properties remain stable up to 60 C.

PHYSICAL	ISO Test Method	Property Value	
Density, g/cm³	1183	1.37	
Moisture, %	62		
(50% RH)		0.8	
(Saturation)		4.5	
MECHANICAL	ISO Test Method	Dry	Conditioned
Tensile Modulus, MPa	527		
23°C		9,300	9,000
Tensile stress at break, MPa	527		
-40°C		249	235
23°C		165	145
Tensile strain at break, %	527		
-40°C		3.6	2.9
23°C		3.5	3.5
IMPACT	ISO Test Method	Dry	Conditioned
Izod Notched Impact, kJ/m²	180		
23°C		23	-
Charpy Notched, kJ/m²	179		
-30°C		10	-
23°C		19	21
Charpy Unnotched, kJ/m²	179		
-30°C		90	-
23°C		95	100
THERMAL	ISO Test Method	Dry	Conditioned
Melting Point, °C	3146	295	-
HDT A, °C	75	240	-
Coef. of Linear Thermal Expansion, Parallel, mm/mm °C		0.25 X10-4	-
Coef. of Linear Thermal Expansion, Normal, mm/mm °C		0.55 X10-4	-
ELECTRICAL	ISO Test Method	Dry	Conditioned
Comparative Tracking Index	IEC 60112	600	600
Volume Resistivity (Ohm)	IEC 60093	>1E13	1E13
Dielectric Constant (1 MHz)	IEC 60250	4.3	4.5
Dissipation Factor (1 MHz)	IEC 60250	300	400
UL RATINGS	UL Test Method	Property Value	
Flammability Rating, 0.75mm	UL94	HB	
Relative Temperature Index, 0.75mm	UL746B		
Mechanical w/o Impact, °C		120	
Mechanical w/ Impact, °C		100	
Electrical, °C		140	
Flammability Rating, 1.5mm	UL94	HB	
Relative Temperature Index, 1.5mm	UL746B		
Mechanical w/o Impact, °C		140	
Mechanical w/ Impact, °C		110	
Electrical, °C		140	
Flammability Rating, 3.0mm	UL94	HB	
Relative Temperature Index, 3.0mm	UL746B		
Mechanical w/o Impact, °C		140	
Mechanical w/ Impact, °C		115	
Electrical, °C		140	

Processing Guidelines
Material Handling

Max. Water content: 0.15%

To ensure optimum part performance, this product must be dried prior to molding and maintained at a moisture level of less than 0.15%. Optimal moisture content is 0.03% or below. Dehumidifying or desiccant dryers operating at 110°C (230°F) at 8 hours drying time is recommended. Further information concerning safe handling procedures can be obtained from the Safety Data Sheet. Alternatively, please contact your BASF representative.

Typical Profile

Melt Temperature: 310-330°C (590-626°F)

Mold Temperature: 80-120°C (176-248°F)

Max Residence Time: 5 minutes

Note

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