

Ultramid® BU50I BK-106

Polyamide 6

Product Description

Ultramid Ultratough Nylon BU50I BK-106 is an unreinforced PA6, impact modified, pigmented black, injection molding product that maintains its impact strength and ductility to -40 deg F (-40 deg C). The extreme low temperature tolerance of Ultramid BU50I BK106 makes it ideal for applications in which the weldline impact strength at low temperatures is critical.

Applications

Ultramid BU50I BK-106 is generally recommended for automotive components, small engines, power tool parts and casings, cold weather and high impact sports gear, such as snowboards, ski components, helmets and hockey masks.

PHYSICAL	ISO Test Method	Property Value	
Density, g/cm	1183	1.06	
Moisture, %	62		
(50% RH)		2.1	
(Saturation)		7.3	
MECHANICAL	ISO Test Method	Dry	Conditioned
Tensile stress at yield, MPa	527		
23C		44	-
Nominal strain at break, %	527		
23C		>50	-
Flexural Strength, MPa	178		
23C		73	-
IMPACT	ISO Test Method	Dry	Conditioned
Izod Notched Impact, kJ/m ²	180		
23C		N	-
THERMAL	ISO Test Method	Dry	Conditioned
Melting Point, C	3146	220	-



Pressures

Injection pressure controls the filling of the part and should be applied for 90% of ram travel. Packing pressure affects the final part and can be used effectively in controlling sink marks and shrinkage. It should be applied and maintained until the gate area is completely frozen off.

Fill Rate

Fast fill rates are recommended to ensure uniform melt delivery to the cavity and prevent premature freezing. Injection speeds of one inch of ram travel per second are typical.

Note

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