

Ultramid® B3L BK00464

Polyamide 6

Ultramid B3L BK00464 is an impact-modified, pigmented black, easy flowing injection molding PA6 grade for fast processing.

Applications

Typical applications include impact-resistant articles such as housings, fittings, small parts and anchors.

PHYSICAL	ISO Test Method	Property Value	
Density, g/cm ³	1183	1.1	
Moisture, %	62		
(50% RH)		2.5	
(Saturation)		9	
MECHANICAL	ISO Test Method	Dry	Conditioned
Tensile Modulus, MPa	527		
23°C		2,750	-
Tensile stress at yield, MPa	527		
23°C		63	-
Tensile strain at yield, %	527		
23°C		4	-
Flexural Modulus, MPa	178		
23°C		2,240	-
IMPACT	ISO Test Method	Dry	Conditioned
Izod Notched Impact, kJ/m²	180		
-40°C		4.6	-
23°C		6.2	-

Charpy Notched, kJ/m²	179		
23°C		6.8	-
THERMAL	ISO Test Method	Dry	Conditioned
Melting Point, °C	3146	220	-
HDT A, °C	75	55	-
HDT B, °C	75	134	-
ELECTRICAL	ISO Test Method	Dry	Conditioned
Comparative Tracking Index	IEC 60112	600	600
Volume Resistivity (Ohm-m)	IEC 60093	1E13	1E10
Dielectric Constant (100 Hz)	IEC 60250	4	-
Dielectric Constant (1 MHz)	IEC 60250	3.5	6.4
Dissipation Factor (100 Hz), E-4	IEC 60250	100	-
Dissipation Factor (1 MHz), E-4	IEC 60250	240	2,400

Processing Guidelines

Material Handling

Max. Water content: 0.15%

Material is supplied in sealed containers and drying prior to molding in a dehumidifying or desiccant dryer is recommended. Drying parameters are dependent upon the actual percentage of moisture in the pellets and typical pre-drying conditions are 2-4 hours at 180F (83C). Further information concerning safe handling procedures can be obtained from the Safety Data Sheet (MSDS), or by contacting your BASF representative.

Typical Profile

Melt Temperature 240-270°C (464-518°F)

Mold Temperature 60-85°C (140-185°F)

Injection and Packing Pressure 35-125 bar (500-1500 psi)

Mold Temperatures

A mold temperature of 60-85°C (140-185°F) is recommended, however temperatures of as low as 10°C (50°F) can be used where applicable.

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.

Note

Although all statements and information in this publication are believed to be accurate and reliable, they are presented gratis and for guidance only, and risks and liability for results obtained by use of the products or application of the suggestions described are assumed by the user. NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH. Statements or suggestions concerning possible use of the products are made without representation or warranty that any such use is free of patent infringement and are not recommendations to infringe any patent. The user should not assume that toxicity data and safety measures are indicated or that other measures may not be required.

BASF Corporation

Engineering Plastics
1609 Biddle Avenue
Wyandotte, MI 48192



General Information

800-BC-RESIN

Technical Assistance

800-527-TECH (734-324-5150)

Web address

<http://www.plasticsportal.com/usa>