MMS-052

Richco
MATERIAL SPECIFICATION (RMS)
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Product Information
Apr 2010

Ultramid® B3S BK00464
Polyamide 6

BASF
The Chemical Company

PHYSICAL	ISO Test Method	Property Value	
Density, g/cm³	1183	1.13	
Moisture, %	62		
(24 Hour)		3	
(50% RH)		3	
(Saturation)		9.5	
RHEOLOGICAL	**ISO Test Method**	**Dry**	**Conditioned**
Melt Volume Rate (275 °C/5 Kg), cc/10min.	1133	175	-
MECHANICAL	**ISO Test Method**	**Dry**	**Conditioned**
Tensile Modulus, MPa	527		
23°C		3,400	1,200
Tensile stress at yield, MPa	527		
23°C		88	45
Tensile strain at yield, %	527		
23°C		3.8	20
Nominal strain at break, %	527		
23°C		10	>50
Flexural Modulus, MPa	178		
23°C		2,900	-
IMPACT	**ISO Test Method**	**Dry**	**Conditioned**
Izod Notched Impact, kJ/m²	180		
23°C		3	-
Charpy Notched, kJ/m²	179		
23°C		4	50
-30°C		3	-
Charpy Unnotched, kJ/m²	179		
23°C		250	N
-30°C		200	-
THERMAL	**ISO Test Method**	**Dry**	**Conditioned**
Melting Point, °C	3146	220	-
HDT A, ° C	75	65	-

Processing Guidelines

Material Handling
Max. Water content: 0.15%
Product is supplied in sealed containers and drying prior to molding is not required. If drying becomes necessary, a dehumidifying or desiccant dryer operating at 80 °C (176 °F) is recommended. Drying time is dependent on moisture level, but 2-4 hours is generally sufficient. Further information concerning safe handling procedures can be obtained from the Material Safety Data Sheet. Alternatively, please contact your BASF representative.

Typical Profile
Melt Temperature 240-285 °C (464-545 °F)
Mold Temperature 65-80 °C (176-203 °F)
Injection and Packing Pressure 35-125 bar (500-1500 psi)

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

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Mold Temperatures
A mold temperature of 65-80 °C (149-176 °F) is recommended, but 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

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