Product Information

Ultramid® 1503-2 NF2004
Polyamide 66

BASF The Chemical Company

Product Description

Ultramid 1503-2 NF2004 is a 33% glass reinforced, heat stabilized injection molding PA6/6.

PHYSICAL	ASTM Test Method	Property Value	
Specific Gravity	D-792	1.40	
Mold Shrinkage (1/8" bar, in/in)		0.003	
Moisture, %	D-570		
(50% RH)		1.7	
(Saturation)		5.7	
MECHANICAL	**ASTM Test Method**	**Dry**	**Conditioned**
Tensile Strength, Break, MPa (psi)	D-638		
23C (73F)		193 (28,000)	-
Elongation, Break, %	D-638		
23C (73F)		3	-
Flexural Modulus, MPa (psi)	D-790		
23C (73F)		8,280 (1,200,000)	-
Flexural Strength, MPa (psi)	D-790		
23C (73F)		276 (40,000)	-
IMPACT	**ASTM Test Method**	**Dry**	**Conditioned**
Notched Izod Impact, J/M (ft-lbs/in)	D-256		
23C (73F)		117 (2.2)	-
THERMAL	**ASTM Test Method**	**Dry**	**Conditioned**
Melting Point, C(F)	D-3418	260 (500)	-
Heat Deflection @ 264 psi (1.8 MPa) C(F)	D-648	252 (485)	-
Heat Deflection @ 66 psi (.45 MPa) C(F)	D-648	297 (566)	-

This product can be processed over a wide range of mold temperatures; however, for applications where aesthetics are critical, a mold surface temperature of 60-100 degC (140-212 degF) is recommended.

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