Product Information

Ultramid® A3Z HP UV BK23220
Polyamide 66

BASF
The Chemical Company

Product Description

Ultramid A3Z HP UV BK23220 is an impact modified PA66 containing heat and ultraviolet light stabilizers. Designed for maximum toughness at low temperatures, Ultramid A3Z HP UV BK23220 offers a unique combination of impact performance and excellent processability.

PHYSICAL	ISO Test Method	Property Value	
Density, g/cm	1183	1.08	
MECHANICAL	**ISO Test Method**	**Dry**	**Conditioned**
Tensile stress at yield, MPa	527		
23C		46	-
Nominal strain at break, %	527		
23C		50	-
Flexural Modulus, MPa	178		
23C		1,703	-
IMPACT	**ISO Test Method**	**Dry**	**Conditioned**
Izod Notched Impact, kJ/m^2	180		
23C		83	-
-40C		22	-
THERMAL	**ISO Test Method**	**Dry**	**Conditioned**
Melting Point, C	3146	258	-
HDT A, C	75	63	-

Processing Guidelines

Material Handling
Max. Water content: 0.20%
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 degC (176 degF) 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 280-304 degC (536-579 degF)
Mold Temperature 60-100 degC (140-212 degF)
Injection and Packing Pressure 35-125 bar (500-1500 psi)

Back Pressure 0-0.35 MPa (0-50 psi)
Screw Speed 40-80 rpm
Screw Compression Ratio 3:1 to 4:1

Mold Temperatures
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.