

# Ultramid® 66 H2 G/35-V0KB

## NAT0046

### Polyamide 66



#### Product Description

Ultramid 66 H2 G/35-V0KB NAT0046 is a 35% glass reinforced, heat stabilized injection molding grade. It is a V-0 self-extinguishing grade, with phosphorous. It offers good flowability and mechanical properties. It has excellent electrical properties.

#### Applications

Ultramid 66H2 G/35-V0KB NAT0046 is designed for applications requiring good processing, mechanical integrity and flammability performance.

PHYSICAL		ISO Test Method	Property Value	
Density, g/cm		1183	1.45	
MECHANICAL		ISO Test Method	Dry	Conditioned
Tensile Modulus, MPa		527		
23C			11,300	-
Tensile stress at break, MPa		527		
23C			175	-
Tensile strain at break, %		527		
23C			2.7	-
Flexural Modulus, MPa		178		
23C			10,700	-
IMPACT		ISO Test Method	Dry	Conditioned
Izod Notched Impact, kJ/m <sup>2</sup>		180		
23C			10	-
-40C			9	-
Charpy Notched, kJ/m <sup>2</sup>		179		
23C			10	-
-30C			9	-
THERMAL		ISO Test Method	Dry	Conditioned
Melting Point, C		3146	260	-
HDT A, C		75	247	-

#### Processing Guidelines

##### Material Handling

Max. Water content: 0.05%

Special handling and safety precautions must be used when processing this grade of material. Please contact your BASF Technical Service Representative for details. Product is supplied in moisture barrier packaging. However, further drying is typically required. 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 Technical Service representative.

##### Typical Profile

Melt Temperature 285-300 degC (545-572 degF)

Mold Temperature 80-90 degC (176-194 degF)

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



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## **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 80-95 degC (176-203 degF) is required.

## **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.

Back pressure can be utilized to provide uniform melt consistency and reduce trapped air and gas. Minimal back pressure should be utilized to prevent glass breakage.

## **Fill Rate**

Fast fill rates are recommended to ensure uniform melt delivery to the cavity and prevent premature freezing. Surface appearance is directly affected by injection rate.

## **Note**

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