

# Ultramid® 1503-2 NF2004

## Polyamide 66

### 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**

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.

