

# Amilan® U320 尼龙 66

## TECHNICAL DATA

### 产品说明

Type:

- Nylon66/High impact

Features:

- High impact

**特性** • 高抗撞击性

**用途** • OA 设备 • 家电部件 • 体育用品  
• 安全设备 • 建筑应用领域 • 橡胶取代  
• 大型家用电器和小型家用电器 • 汽车电子  
• 电气/电子应用领域 • 汽车领域的应用

**加工方法** • 注射成型

**ISO Designation** • >PA66-I<

### ASTM & ISO 属性

| 物理性能                               | 干燥          | 调节后的  | 单位制   | 测试方法       |
|------------------------------------|-------------|-------|-------|------------|
| 密度 (23°C)                          | 1.09        | --    | g/cm³ | ISO 1183   |
| 收缩率 - 垂直 <sup>1</sup><br>(3.00 mm) | 1.2 – 1.5   | --    | %     | 内部方法       |
| 吸水率                                |             |       |       | ISO 62     |
| 24 hr, 23°C                        | 1.1         | --    | %     |            |
| 饱和, 23°C                           | 6.0         | --    | %     |            |
| 机械性能                               | 干燥          | 调节后的  | 单位制   | 测试方法       |
| 拉伸应力                               |             |       |       | ISO 527-2  |
| -40°C                              | 100         | 92.0  | MPa   |            |
| 23°C                               | 60.0        | 43.0  | MPa   |            |
| 拉伸应变                               |             |       |       | ISO 527-2  |
| 断裂, -40°C                          | 5.5         | 8.5   | %     |            |
| 断裂, 23°C                           | 30          | 50    | %     |            |
| 弯曲模量                               |             |       |       | ISO 178    |
| -40°C                              | 2.60        | 2.60  | GPa   |            |
| 23°C                               | 2.00        | 0.800 | GPa   |            |
| 弯曲应力                               |             |       |       | ISO 178    |
| -40°C                              | 115         | 110   | MPa   |            |
| 23°C                               | 75.0        | 40.0  | MPa   |            |
| 泰伯耐磨性<br>(1000 Cycles)             | 7.00 – 8.00 | --    | mg    | ISO 9352   |
| 冲击性能                               | 干燥          | 调节后的  | 单位制   | 测试方法       |
| 简支梁缺口冲击强度                          |             |       |       | ISO 179    |
| -40°C                              | 14          | 20    | kJ/m² |            |
| 23°C                               | 22          | 57    | kJ/m² |            |
| 硬度                                 | 干燥          | 调节后的  | 单位制   | 测试方法       |
| 洛氏硬度 (R 计秤, 80°C)                  | 114         | --    |       | ISO 2039-2 |

| 热性能           | 干燥      | 调节后的 | 单位制                      | 测试方法        |
|---------------|---------|------|--------------------------|-------------|
| 热变形温度         |         |      |                          |             |
| 0.45 MPa, 未退火 | 180     | --   | °C                       | ISO 75-2/B  |
| 1.8 MPa, 未退火  | 60.0    | --   | °C                       | ISO 75-2/A  |
| 熔融温度          | 265     | --   | °C                       | DSC         |
| 线形热膨胀系数 - 流动  | 10 – 11 | --   | cm <sup>3</sup> -5/cm/°C | ISO 11359-2 |

#### 补充信息

干燥 Water absorption Moisture Content 2.5%

#### 备注

<sup>1</sup> 80x80x3mm

#### Remarks for Handling

#### Safety Precautions

1. Refer to the Material Safety data sheet for AMILAN™ before use.
2. During drying and molding of AMILAN™, volatile components which can irritate eyes, nose, and throat may be released. When such heat treatment is performed, appropriate local ventilation measures should be taken.
3. Sweep up and dispose of spilled pellets to prevent slipping.
4. Don't pile stocks too high in order to avoid injury caused by the product falling.

#### Care in Handling

1. The figures described herein are representative values of natural colors obtained based on the specific test method, and are NOT guaranteed values.
2. For our colored products, the figures described herein will vary depending on the type and amount of pigment, dye, and additive used.
3. The information contained herein is currently information we can reasonably obtain. The information may be revised without notice.
4. The information contained herein, including but not limited to application examples, does NOT represent, warrant or guarantee the quality or safety of your products. When using our products for your or third party's products, in consideration of various relevant laws and regulations, industrial property rights, product standards, self-regulatory standards, etc., please conduct product test etc. and confirm the quality or safety by yourself.
5. The basis that show the combustion resistance described herein is only the evaluation result in the test performed on the test piece prepared by the procedure in accordance with each specific standard. It can NOT be applied to the risk assessment in an actual fire. Note: For UL certification values, please refer to the Yellow card issued by UL (File No. E41797).
6. When using with medical devices, food packages, safety instruments or toys for infant, and so on, consult us about the concrete application and usage beforehand by all means. Do NOT use our products for any medical internal implantation.
7. Regarding export of our products and exports of products incorporating our products, please comply with relevant laws and regulations such as foreign exchange and foreign trade laws.
8. Under the chemical substance management system of each country, the chemical substance used in our products is regulated, and it may be necessary to apply separately or it may not be possible to import or export. If you are an exporter or importer of our products, please contact us for regulatory compliance in your country.
9. Refer to Safety Data Sheet for this our product before use.
10. We make NO representation, warranty or guarantee whether expressed or implied, in respect of fitness for a particular purpose and safety of our products for your products. You will be responsible for ascertaining the suitability of our products for your purpose and safety.
11. During drying and molding, volatile components which can irritate eyes, nose, and throat may be released. When such heat treatment is performed, appropriate local ventilation measures should be taken.
12. Sweep up and dispose of spilled pellets to prevent slipping.
13. Don't pile stocks too high in order to avoid injury caused by the product falling.