# UNIPA® Ld

Polyamide 66

Nytef Plastics, Ltd.

## Message:

Since its introduction in 1938, Nylon has become one of the world's most widely recognized and utilized engineering grade thermoplastics. Nylon's unique combination of high strength, good toughness, outstanding chemical resistance, and excellent wear and abrasion resistance have made it the material of choice for product designs in a multitude of industries. When used to replace wear grade metals like brass and bronze, no other material provides the combination of extended wear life, light weight, and low fabricated part cost of Nylon. Nytef Plastics, Ltd. manufactures UNIPA® Nylon stock shapes in a wide variety of types and stock shape configurations. These UNIPA Nylon products fall into the categories of Type 6/6 Extruded UNIPA Nylons and Type 6 UNIPA M Cast Nylons. While both types of Nylon are very similar, there are performance and availability differences between the two grades that should be noted:
UNIPA Type 6/6 Extruded Nylons:
offer improved toughness
offer improved flame resistance
are available in smaller rod diameters (< 2" dia.)
Nytef Plastic's UNIPA Nylon 6/6 extruded stock shapes are available in a wide range of grades— including both lubricated and fiber reinforced products. UNIPA Nylon 6/6 materials are offered in a complete range of extruded round, square, and hex rod, heavy gauge plate, and tubular bar sizes.

| General Information | |
|---|---|
| Additive | Molybdenum Disulfide Lubricant |
| Features | Flame Retardant |
| | Good Abrasion Resistance |
| | Good Chemical Resistance |
| | Good Toughness |
| | Good Wear Resistance |
| | High Stiffness |
| | High Strength |
| | Lubricated |
| | Machinable |
| Uses | Automotive Applications |
| | Bearings |
| | Bushings |
| | Construction Applications |
| | Electrical Parts |
| | Electrical/Electronic Applications |
| | Fluid Handling |
| | Food Service Applications |
| | Gears |
| | Mining Applications |
| | Molds/Dies/Tools |
| | Pulleys |
| | Pump Parts |
| | Rollers |

| | |
|---|---|
| | Textile Applications |
| | Valves/Valve Parts |
| | Wear Strip |
| | Wheels |

| | |
|---|---|
| Appearance | Dark Grey |
| Forms | Preformed Parts |
| | Rod |

| Physical | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Specific Gravity | 1.16 | g/cm³ | ASTM D792 |
| Water Absorption | | | ASTM D570 |
| 24 hr | 0.70 | % | |
| Saturation | 6.5 | % | |
| **Hardness** | **Nominal Value** | **Unit** | **Test Method** |
| Rockwell Hardness | | | ASTM D785 |
| M-Scale | 85 | | |
| R-Scale | 115 | | |
| **Mechanical** | **Nominal Value** | **Unit** | **Test Method** |
| Tensile Modulus | 3450 | MPa | ASTM D638 |
| Tensile Strength | 81.4 | MPa | ASTM D638 |
| Tensile Elongation (Break) | 50 | % | ASTM D638 |
| Flexural Modulus | 3310 | MPa | ASTM D790 |
| Flexural Strength | 103 | MPa | ASTM D790 |
| Compressive Strength | 110 | MPa | ASTM D695 |
| Coefficient of Friction | 0.23 | | ASTM D1894 |
| **Impact** | **Nominal Value** | **Unit** | **Test Method** |
| Notched Izod Impact | 43 | J/m | ASTM D256 |
| **Thermal** | **Nominal Value** | **Unit** | **Test Method** |
| Deflection Temperature Under Load (1.8 MPa, Unannealed) | 98.9 | °C | ASTM D648 |
| Continuous Use Temperature | 98.9 | °C | Internal Method |
| Peak Melting Temperature | 257 | °C | ASTM D3418 |
| CLTE - Flow | 7.2E-5 | cm/cm/°C | ASTM D696 |
| **Electrical** | **Nominal Value** | **Unit** | **Test Method** |
| Volume Resistivity | 1.0E+13 | ohms·cm | ASTM D257 |
| Dielectric Strength [1] | 14 | kV/mm | ASTM D149 |
| Dielectric Constant (60 MHz) | 3.70 | | ASTM D150 |
| **Flammability** | **Nominal Value** | **Unit** | **Test Method** |
| Flame Rating | V-2 | | UL 94 |
| **NOTE** | | | |
| 1. | Method A (Short-Time) | | |

The information and data on this page are provided by manufacturers and document providers.  SHANGHAI SUSHENG  assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection.All rights belong to the original authors. If any infringement occurs, please contact us immediately.

## Recommended distributors for this material

### Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China