

# UBESTA 3024 U

Polyamide 12

UBE Engineering Plastics, S.A.

Message:

UBESTA 3024 U is a medium viscosity, non-reinforced and non-plasticized Polyamide 12 for injection moulding and extrusion application. UBESTA 3024 U shows only low moisture absorption and therefore exceptional dimension stability.

| General Information |                            |
|---------------------|----------------------------|
| UL YellowCard       | E48133-240220              |
| Additive            | heat stabilizer            |
| Features            | Good dimensional stability |
|                     | Low hygroscopicity         |
|                     | Thermal Stability          |
|                     | Medium viscosity           |
| Appearance          | Natural color              |
| Forms               | Particle                   |
| Processing Method   | Extrusion                  |
|                     | Injection molding          |

| Physical                                  | Nominal Value | Unit     | Test Method |
|-------------------------------------------|---------------|----------|-------------|
| Density                                   | 1.02          | g/cm³    | ISO 1183    |
| Melt Mass-Flow Rate (MFR) (235°C/2.16 kg) | 10            | g/10 min | ISO 1133    |
| Molding Shrinkage                         |               |          | ISO 294-4   |
| Vertical flow direction                   | 1.2           | %        | ISO 294-4   |
| Flow direction                            | 0.90          | %        | ISO 294-4   |
| Water Absorption (23°C, 24 hr)            | 0.70          | %        | ISO 62      |

| Hardness                     | Nominal Value | Unit | Test Method |
|------------------------------|---------------|------|-------------|
| Rockwell Hardness (R-Scale)  | 105           |      | ISO 2039-2  |
| Durometer Hardness (Shore D) | 78            |      | ISO 868     |

| Mechanical             | Nominal Value | Unit | Test Method |
|------------------------|---------------|------|-------------|
| Tensile Stress (Yield) | 45.0          | MPa  | ISO 527-2   |
| Tensile Strain         |               |      | ISO 527-2   |
| Yield                  | 4.0           | %    | ISO 527-2   |
| Fracture               | 200           | %    | ISO 527-2   |
| Flexural Modulus       | 1500          | MPa  | ISO 178     |
| Flexural Stress        | 59.0          | MPa  | ISO 178     |

| Impact                         | Nominal Value | Unit  | Test Method |
|--------------------------------|---------------|-------|-------------|
| Charpy Notched Impact Strength |               |       | ISO 179/1eA |
| -40°C, complete fracture       | 6.0           | kJ/m² | ISO 179/1eA |

| 23°C, complete fracture     | 6.0           | kJ/m <sup>2</sup> | ISO 179/1eA |
|-----------------------------|---------------|-------------------|-------------|
| Thermal                     | Nominal Value | Unit              | Test Method |
| Heat Deflection Temperature |               |                   |             |
| 0.45 MPa, not annealed      | 90.0          | °C                | ISO 75-2/B  |
| 1.8 MPa, not annealed       | 45.0          | °C                | ISO 75-2/A  |
| Melting Temperature (DSC)   | 178           | °C                | ISO 3146    |
| CLTE - Flow                 | 1.3E-4        | cm/cm/°C          | ISO 11359-2 |
| Electrical                  | Nominal Value | Unit              | Test Method |
| Volume Resistivity          | 1.0E+15       | ohms·cm           | IEC 60093   |
| Additional Information      |               |                   |             |

The value listed as Melting Temperature, ISO 3146, was tested in accordance with ISO 11357. Tensile Strain at Break, ISO 527: >200% Abrasion Loss, ISO 9352, CS-17, 1000 rev.: 6 mg

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



WECHAT