

## Kuraray Genestar®, N1001D-U03 Nylon

Category : Polymer , Thermoplastic , Nylon

### Material Notes:

Standard unreinforced extrusion grade. Main Features: Outstanding fuel barrier Heat resistance Example of applications: Multi-layered fuel tube

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Kuraray-Genestar-N1001D-U03-Nylon.php](http://www.lookpolymers.com/polymer_Kuraray-Genestar-N1001D-U03-Nylon.php)

| Physical Properties               | Metric      | English                   | Comments        |
|-----------------------------------|-------------|---------------------------|-----------------|
| Specific Gravity                  | 1.10 g/cc   | 1.10 g/cc                 |                 |
| Density                           | 1.11 g/cc   | 0.0401 lb/in <sup>3</sup> | ISO 1183        |
| Water Absorption                  | 0.25 %      | 0.25 %                    | ISO 62          |
| Linear Mold Shrinkage, Flow       | 0.015 cm/cm | 0.015 in/in               | ISO 294-4, 2577 |
| Linear Mold Shrinkage, Transverse | 0.017 cm/cm | 0.017 in/in               | ISO 294-4, 2577 |

| Mechanical Properties      | Metric                   | English                    | Comments        |
|----------------------------|--------------------------|----------------------------|-----------------|
| Tensile Strength, Yield    | 65.0 MPa                 | 9430 psi                   | ISO 527-1/-2    |
| Elongation at Break        | 10 %                     | 10 %                       | ISO 527-1/-2    |
| Elongation at Yield        | 7.0 %                    | 7.0 %                      | ISO 527-1/-2    |
| Tensile Modulus            | 1.88 GPa                 | 273 ksi                    | ISO 527-1/-2    |
| Flexural Strength          | 80.0 MPa                 | 11600 psi                  | ISO 178         |
| Flexural Modulus           | 1.80 GPa                 | 261 ksi                    | ISO 178         |
| Charpy Impact, Notched     | 1.70 J/cm <sup>2</sup>   | 8.09 ft-lb/in <sup>2</sup> | ISO 179/1eA     |
|                            | @Temperature -40.0<br>°C | @Temperature -40.0<br>°F   |                 |
|                            | NB                       | NB                         | ISO 179/1eA     |
|                            | @Temperature 23.0<br>°C  | @Temperature 73.4 °F       |                 |
| Coefficient of Friction    | 0.15                     | 0.15                       | ISO JIS K7218-A |
| K Factor (Wear Factor)     | 170                      | 170                        | [mg]            |
| Limiting Pressure Velocity | 0.640 MPa-m/sec          | 18300 psi-ft/min           |                 |

| Thermal Properties                          | Metric  | English | Comments                  |
|---------------------------------------------|---------|---------|---------------------------|
| Melting Point                               | 264 Â°C | 507 Â°F | 10Â°C/min; ISO 11357-1/-3 |
| Deflection Temperature at 1.8 MPa (264 psi) | 110 Â°C | 230 Â°F | ISO 75-1/-2               |
| Glass Transition Temp, Tg                   | 125 Â°C | 257 Â°F | 10Â°C/min; ISO 11357-1/-2 |

| Descriptive Properties | Value                                 | Comments |
|------------------------|---------------------------------------|----------|
| Applications           | Automotive                            |          |
|                        | General Purpose                       |          |
| Chemical Resistance    | Acid Resistance                       |          |
|                        | Alkali Resistance                     |          |
|                        | Environmental Stress Crack Resistance |          |
|                        | General Chemical Resistance           |          |
|                        | Grease Resistance                     |          |
|                        | Hydrolytically Stable                 |          |
|                        | Oil Resistance                        |          |
|                        | Solvent Resistance                    |          |
| Delivery Form          | Black                                 |          |
| Other Features         | Barrier Properties                    |          |
|                        | Melt Strength                         |          |
|                        | Thermal Stability                     |          |
|                        | Weldable                              |          |
| Processing             | Blow Molding                          |          |
|                        | Film Extrusion                        |          |
|                        | Injection Molding                     |          |
|                        | Pipe/Tube Extrusion                   |          |
|                        | Thermoforming                         |          |
| Regional Availability  | Asia Pacific                          |          |
|                        | Europe                                |          |

| Descriptive Properties  | Value                             | Comments |
|-------------------------|-----------------------------------|----------|
|                         | North America                     |          |
|                         | South and Central America         |          |
| Special Characteristics | Heat Stabilized or Stable to Heat |          |
|                         | High Impact or Impact Modified    |          |

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China