

## Nilit Polynil® P50FIL Super Fast Cycling, Nucleated Nylon 66

Category : Polymer , Thermoplastic , Nylon , Nylon 66 , Nylon 66, Nucleated

### Material Notes:

Description: Polynil P50 FIL is a nucleated, internally lubricated NYLON 66 with excellent flow characteristics and very fast cycle time. It is widely used throughout many industries for mass production articles that require fast cycle times, like lighter bodies, aerosol sprays and terminal blocks. Key characteristics: Excellent flow Fast cycle time High elongation Good mould release High toughness Good thermal performance Information provided by NILIT.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Nilit-Polynil-P50FIL-Super-Fast-Cycling-Nucleated-Nylon-66.php](http://www.lookpolymers.com/polymer_Nilit-Polynil-P50FIL-Super-Fast-Cycling-Nucleated-Nylon-66.php)

| Physical Properties            | Metric      | English                   | Comments                                    |
|--------------------------------|-------------|---------------------------|---------------------------------------------|
| Density                        | 1.14 g/cc   | 0.0412 lb/in <sup>3</sup> | ASTM D792                                   |
| Water Absorption               | 1.5 %       | 1.5 %                     | 24h in H <sub>2</sub> O; sim. ISO 62        |
| Water Absorption at Saturation | 8.5 %       | 8.5 %                     | sim. ISO 62                                 |
| Loss On Ignition               | 28 %        | 28 %                      | ASTM D2863                                  |
| Viscosity Measurement          | 50          | 50                        | relative viscosity (formic acid); ASTM D789 |
| Linear Mold Shrinkage, Flow    | 0.011 cm/cm | 0.011 in/in               | Nilit                                       |

| Mechanical Properties      | Metric                 | English                    | Comments  |
|----------------------------|------------------------|----------------------------|-----------|
| Tensile Strength, Yield    | 86.9 MPa               | 12600 psi                  | ASTM D638 |
| Elongation at Break        | 35 %                   | 35 %                       | ASTM D638 |
| Flexural Strength          | 124 MPa                | 18000 psi                  | ASTM D790 |
| Flexural Modulus           | 2.92 GPa               | 424 ksi                    | ASTM D790 |
| Izod Impact, Notched (ISO) | 3.99 kJ/m <sup>2</sup> | 1.90 ft-lb/in <sup>2</sup> | ASTM D256 |
| Charpy Impact Unnotched    | NB                     | NB                         | ISO 179   |

| Thermal Properties                          | Metric              | English              | Comments  |
|---------------------------------------------|---------------------|----------------------|-----------|
| Deflection Temperature at 1.8 MPa (264 psi) | 72.2 °C             | 162 °F               | ASTM D648 |
| Flammability, UL94                          | V-2                 | V-2                  |           |
|                                             | @Thickness 0.800 mm | @Thickness 0.0315 in |           |
|                                             | V-2                 | V-2                  |           |
|                                             | @Thickness 1.60 mm  | @Thickness 0.0630 in |           |

| Thermal Properties         | Metric             | English              | Comments  |
|----------------------------|--------------------|----------------------|-----------|
| Electrical Properties      | Metric             | English              | Comments  |
| Dielectric Strength        | 18.0 kV/mm         | 457 kV/in            | ASTM D149 |
|                            | @Thickness 2.00 mm | @Thickness 0.0787 in |           |
| Comparative Tracking Index | >= 600 V           | >= 600 V             | UL 746    |

| Descriptive Properties      | Value | Comments          |
|-----------------------------|-------|-------------------|
| Heat Resistance - Ball Test | OK    | at 125°C, IEC 309 |
|                             | OK    | at 165°C, IEC 309 |

## 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