

SABIC Innovative Plastics LNP STAT-LOY PF306 PA 6

Category : Polymer , Thermoplastic , Nylon , Nylon 6

Material Notes:

LNP* STAT-LOY* PF306 is a compound based on Nylon 6 resin containing 30% Glass Fiber. Added feature of this grade includes: Antistat.

Order this product through the following link:

http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-LNP-STAT-LOY-PF306-PA-6.php

| Physical Properties | Metric | English | Comments |
|-----------------------------------|-----------------------|---------------------------|---------------------------|
| Density | 1.39 g/cc | 0.0502 lb/in ³ | ASTM D792 |
| | 1.39 g/cc | 0.0502 lb/in ³ | ISO 1183 |
| Moisture Absorption | 5.10 % | 5.10 % | 50% RH, 24 hrs; ASTM D570 |
| Linear Mold Shrinkage, Flow | 0.0028 cm/cm | 0.0028 in/in | ISO 294 |
| | @Time 86400 sec | @Time 24.0 hour | |
| Linear Mold Shrinkage, Transverse | 0.0020 - 0.0040 cm/cm | 0.0020 - 0.0040 in/in | ASTM D955 |
| | @Time 86400 sec | @Time 24.0 hour | |
| Linear Mold Shrinkage, Transverse | 0.0070 - 0.0090 cm/cm | 0.0070 - 0.0090 in/in | ASTM D955 |
| | @Time 86400 sec | @Time 24.0 hour | |
| Linear Mold Shrinkage, Transverse | 0.0082 cm/cm | 0.0082 in/in | ISO 294 |
| | @Time 86400 sec | @Time 24.0 hour | |

| Mechanical Properties | Metric | English | Comments |
|---------------------------|----------|-----------|----------------------|
| Tensile Strength at Break | 83.0 MPa | 12000 psi | ISO 527 |
| | 93.0 MPa | 13500 psi | ASTM D638 |
| Tensile Strength, Yield | 83.0 MPa | 12000 psi | ISO 527 |
| | 93.0 MPa | 13500 psi | ASTM D638 |
| Elongation at Break | 2.8 % | 2.8 % | ASTM D638 |
| | 2.8 % | 2.8 % | ISO 527 |
| Elongation at Yield | 2.7 % | 2.7 % | ASTM D638 |
| | 2.7 % | 2.7 % | ISO 527 |
| Tensile Modulus | 7.47 GPa | 1080 ksi | 1 mm/min; ISO 527 |
| | 7.58 GPa | 1100 ksi | 50 mm/min; ASTM D638 |

| Mechanical Properties | Metric | English | Comments |
|------------------------------|------------------------|----------------------------|---|
| | 106 MPa | 15400 psi | ISO 178 |
| Flexural Modulus | 5.51 GPa | 799 ksi | ASTM D790 |
| | 6.00 GPa | 870 ksi | ISO 178 |
| Izod Impact, Notched | 1.01 J/cm | 1.89 ft-lb/in | ASTM D256 |
| Izod Impact, Unnotched | 9.55 J/cm | 17.9 ft-lb/in | ASTM D4812 |
| Izod Impact, Notched (ISO) | 7.00 kJ/m ² | 3.33 ft-lb/in ² | 80*10*4; ISO 180/1A |
| Izod Impact, Unnotched (ISO) | 45.0 kJ/m ² | 21.4 ft-lb/in ² | 80*10*4; ISO 180/1U |
| Dart Drop, Total Energy | 17.0 J | 12.5 ft-lb | Instrumented Impact Energy @ peak; ASTM D3763 |
| Impact Test | 6.00 J | 4.43 ft-lb | Multiaxial Impact; ISO 6603 |

| Thermal Properties | Metric | English | Comments |
|---|--|--|-----------------------------------|
| CTE, linear, Parallel to Flow | 119 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$ | 66.1 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$ | ASTM E 831 |
| | @Temperature -40.0 - 40.0 $\text{Å}^\circ\text{C}$ | @Temperature -40.0 - 104 $\text{Å}^\circ\text{F}$ | |
| | 119 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$ | 66.1 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$ | ISO 11359-2 |
| | @Temperature -40.0 - 40.0 $\text{Å}^\circ\text{C}$ | @Temperature -40.0 - 104 $\text{Å}^\circ\text{F}$ | |
| CTE, linear, Transverse to Flow | 39.6 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$ | 22.0 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$ | ASTM E 831 |
| | @Temperature -40.0 - 40.0 $\text{Å}^\circ\text{C}$ | @Temperature -40.0 - 104 $\text{Å}^\circ\text{F}$ | |
| Deflection Temperature at 0.46 MPa (66 psi) | 40.0 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$ | 22.2 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$ | ISO 11359-2 |
| | @Temperature -40.0 - 40.0 $\text{Å}^\circ\text{C}$ | @Temperature -40.0 - 104 $\text{Å}^\circ\text{F}$ | |
| Deflection Temperature at 0.46 MPa (66 psi) | 201 $\text{Å}^\circ\text{C}$ | 394 $\text{Å}^\circ\text{F}$ | Flatw 80*10*4 sp=64mm; ISO 75/Bf |
| | 202 $\text{Å}^\circ\text{C}$ | 396 $\text{Å}^\circ\text{F}$ | unannealed; ASTM D648 |
| | @Thickness 3.20 mm | @Thickness 0.126 in | |
| Deflection Temperature at 1.8 MPa (264 psi) | 182 $\text{Å}^\circ\text{C}$ | 360 $\text{Å}^\circ\text{F}$ | Flatw 80*10*4 sp=64mm; ISO 75/ Af |
| | 185 $\text{Å}^\circ\text{C}$ | 365 $\text{Å}^\circ\text{F}$ | unannealed; ASTM D648 |
| | @Thickness 3.20 mm | @Thickness 0.126 in | |

| Electrical Properties | Metric | English | Comments |
|-----------------------|--------------|--------------|-----------|
| Surface Resistance | 9.0 - 11 ohm | 9.0 - 11 ohm | ASTM D257 |

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

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