

ALM PA 606-FR Filled Nylon 12 Prototyping Polymer

Category : Polymer , Rapid Prototyping Polymer , Thermoplastic , Nylon , Nylon 12

Material Notes:

Only commercially available fire retardant nylon 12 material, which meets FAR 25.853 60 second burn specification. The parts produced from PA 606-FR have a much smoother surface finish and sharper feature detail when compared to FR-106. The PA 606-FR will have both mechanical and physical property characteristics similar to PA 650. Information provided by Advanced Laser Materials (ALM).

Order this product through the following link:

http://www.lookpolymers.com/polymer_ALM-PA-606-FR-Filled-Nylon-12-Prototyping-Polymer.php

| Physical Properties | Metric | English | Comments |
|---------------------|--------------------------------------|--------------------------------------|-------------------|
| Bulk Density | 0.460 g/cc | 0.0166 lb/in ³ | ASTM D1895 |
| Density | 1.02 g/cc | 0.0368 lb/in ³ | ASTM D792 |
| Particle Size | 55 µm | 55 µm | D50 |
| | 30 - 100 µm | 30 - 100 µm | D10-D90 |
| Melt Flow | 50 g/10 min | 50 g/10 min | 3 min; ASTM D1238 |
| | @Load 5.00 kg, Temperature 235 °C | @Load 11.0 lb, Temperature 455 °F | |

| Mechanical Properties | Metric | English | Comments |
|----------------------------|-----------|---------------|---------------|
| Tensile Strength, Ultimate | 48.0 MPa | 6960 psi | XY; ASTM D638 |
| Elongation at Break | 24 % | 24 % | XY; ASTM D638 |
| Tensile Modulus | 1.70 GPa | 247 ksi | XY; ASTM D638 |
| Flexural Modulus | 1.50 GPa | 218 ksi | XY; ASTM D790 |
| Izod Impact, Notched | 2.20 J/cm | 4.12 ft-lb/in | ASTM D256 |
| Izod Impact, Unnotched | 4.40 J/cm | 8.24 ft-lb/in | ASTM D256 |

| Thermal Properties | Metric | English | Comments |
|---|---------|---------|------------|
| Melting Point | 181 °C | 358 °F | ASTM D3418 |
| Deflection Temperature at 0.46 MPa (66 psi) | 177 °C | 351 °F | ASTM D648 |
| Deflection Temperature at 1.8 MPa (264 psi) | 86.0 °C | 187 °F | ASTM D648 |

| Electrical Properties | Metric | English | Comments |
|-----------------------|--------|---------|----------|
|-----------------------|--------|---------|----------|

| Volume Resistivity Electrical Properties | 3.10e+14 ohm-cm Metric | 3.10e+14 ohm-cm English | 50% RH, 500V; ASTM D257 Comments |
|---|---------------------------|----------------------------|-------------------------------------|
| Surface Resistance | 3.00e+14 ohm | 3.00e+14 ohm | 50% RH, 500V; ASTM D257 |
| Dielectric Constant | 2.9 | 2.9 | 50% RH, 500V; ASTM D150 |

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