

## Eurostar Starflam AFR200B PA66, Flame Retardant, Injection Molding

Category : Polymer , Thermoplastic , Nylon , Nylon 66 , Nylon 66, Unreinforced, Flame Retardant

### Material Notes:

Staramide AFR200B is an Unfilled, Flame Retardant Polyamide 66, Injection Molding Resin Information provided by Eurostar.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Eurostar-Starflam-AFR200B-PA66-Flame-Retardant-Injection-Molding.php](http://www.lookpolymers.com/polymer_Eurostar-Starflam-AFR200B-PA66-Flame-Retardant-Injection-Molding.php)

| Physical Properties            | Metric                        | English                       | Comments                   |
|--------------------------------|-------------------------------|-------------------------------|----------------------------|
| Density                        | 1.35 g/cc                     | 0.0488 lb/in <sup>3</sup>     | ISO 1183                   |
| Water Absorption at Saturation | 6.5 %<br>@Temperature 23.0 °C | 6.5 %<br>@Temperature 73.4 °F | ISO 62-1                   |
| Linear Mold Shrinkage, Flow    | 0.010 - 0.015 cm/cm           | 0.010 - 0.015 in/in           | on Tensile Bar; E2P method |

| Mechanical Properties      | Metric                                          | English                                             | Comments            |
|----------------------------|-------------------------------------------------|-----------------------------------------------------|---------------------|
| Hardness, Rockwell R       | 120                                             | 120                                                 | ISO 2039-2          |
| Tensile Strength at Break  | 80.0 MPa                                        | 11600 psi                                           | 50 mm/min; ISO 527  |
| Tensile Strength, Yield    | 80.0 MPa                                        | 11600 psi                                           | 50 mm/min; ISO 527  |
| Elongation at Break        | 6.0 %                                           | 6.0 %                                               | 50 mm/min; ISO 527  |
| Elongation at Yield        | 3.7 %                                           | 3.7 %                                               | 50 mm/min; ISO 527  |
| Tensile Modulus            | 3.00 GPa                                        | 435 ksi                                             | 1 mm/min; ISO 527   |
| Flexural Strength          | 105 MPa                                         | 15200 psi                                           | 2 mm/min; ISO 178   |
| Flexural Modulus           | 2.80 GPa                                        | 406 ksi                                             | 2 mm/min; ISO 178   |
| Izod Impact, Notched (ISO) | 3.00 kJ/m <sup>2</sup><br>@Temperature -40.0 °C | 1.43 ft-lb/in <sup>2</sup><br>@Temperature -40.0 °F | 80x10x4; ISO 180/1A |
|                            | 4.00 kJ/m <sup>2</sup><br>@Temperature -20.0 °C | 1.90 ft-lb/in <sup>2</sup><br>@Temperature -4.00 °F | 80x10x4; ISO 180/1A |
|                            | 5.00 kJ/m <sup>2</sup><br>@Temperature 23.0 °C  | 2.38 ft-lb/in <sup>2</sup><br>@Temperature 73.4 °F  | 80x10x4; ISO 180/1A |

| Thermal Properties            | Metric                              | English                               | Comments    |
|-------------------------------|-------------------------------------|---------------------------------------|-------------|
| CTE, linear, Parallel to Flow | 85.0 µm/m-°C<br>@Temperature 23.0 - | 47.2 µin/in-°F<br>@Temperature 73.4 - | ISO 11359-2 |

| Thermal Properties                          | 60.0 °C<br>Metric                           | 140 °F<br>English                            | Comments                             |
|---------------------------------------------|---------------------------------------------|----------------------------------------------|--------------------------------------|
| CTE, linear, Transverse to Flow             | 85.0 µm/m-°C<br>@Temperature 23.0 - 60.0 °C | 47.2 µin/in-°F<br>@Temperature 73.4 - 140 °F | ISO 11359-2                          |
| Hot Ball Pressure Test                      | 123 - 127 °C                                | 253 - 261 °F                                 | IEC 60695-10-2                       |
| Deflection Temperature at 0.46 MPa (66 psi) | 216 °C                                      | 421 °F                                       | Edgew 120x10x4, sp=100 mm; ISO 75/Be |
| Deflection Temperature at 1.8 MPa (264 psi) | 100 °C                                      | 212 °F                                       | Edgew 120x10x4, sp=100 mm; ISO 75/Ae |
| Vicat Softening Point                       | 245 °C                                      | 473 °F                                       | B/120; ISO 306                       |
| UL RTI, Electrical                          | 65.0 °C                                     | 149 °F                                       |                                      |
| UL RTI, Mechanical with Impact              | 65.0 °C                                     | 149 °F                                       |                                      |
| UL RTI, Mechanical without Impact           | 65.0 °C                                     | 149 °F                                       |                                      |
| Flammability, UL94                          | V-0<br>@Thickness 0.750 mm                  | V-0<br>@Thickness 0.0295 in                  |                                      |
| Oxygen Index                                | 29 %                                        | 29 %                                         | ISO 4589                             |
| Glow Wire Test                              | 960 °C<br>@Thickness 2.00 mm                | 1760 °F<br>@Thickness 0.0787 in              | IEC 60695-2-12                       |

| Electrical Properties      | Metric          | English         | Comments     |
|----------------------------|-----------------|-----------------|--------------|
| Volume Resistivity         | 1.00e+13 ohm-cm | 1.00e+13 ohm-cm | IEC 60093    |
| Comparative Tracking Index | 250 V           | 250 V           | M; IEC 60112 |
|                            | 350 V           | 350 V           | IEC 60112    |

| Processing Properties | Metric                                    | English                                | Comments |
|-----------------------|-------------------------------------------|----------------------------------------|----------|
| Zone 1                | 260 - 270 °C                              | 500 - 518 °F                           |          |
| Zone 2                | 270 - 280 °C                              | 518 - 536 °F                           |          |
| Zone 3                | 270 - 280 °C                              | 518 - 536 °F                           |          |
| Melt Temperature      | 270 - 290 °C                              | 518 - 554 °F                           |          |
| Mold Temperature      | 60.0 - 90.0 °C                            | 140 - 194 °F                           |          |
| Drying Temperature    | 75.0 - 85.0 °C<br>@Time 14400 - 21600 sec | 167 - 185 °F<br>@Time 4.00 - 6.00 hour |          |

| Processing Properties | Metric | English | Comments |
|-----------------------|--------|---------|----------|
| Moisture Content      | 1.2%   |         |          |

**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