

## Technical Data Sheet

### *Polyflam* 55N5006UG6191 (12MI)



Polycarbonate

#### Product Description

*Polyflam* 55N5006UG6191 (12MI) is a Polycarbonate material.

**Forms** Pellets  
**Additive** Flame Retardant

| Typical Properties                                     | Nominal Value | Units             | Test Method |
|--------------------------------------------------------|---------------|-------------------|-------------|
| <b>Physical</b>                                        |               |                   |             |
| Melt Flow Rate, (300 °C/1.2 kg)                        | 12            | g/10 min          | ASTM D1238  |
| Density - Specific Gravity                             | 1.23          | g/cm <sup>3</sup> | ASTM D792   |
| <b>Mechanical</b>                                      |               |                   |             |
| Tensile Strength at Yield                              | 60.7          | MPa               | ASTM D638   |
| Flexural Modulus, (Tangent)                            | 2240          | MPa               | ASTM D790   |
| <b>Impact</b>                                          |               |                   |             |
| Gardner Impact                                         | >36.2         | J                 | ASTM D5420  |
| Notched Izod Impact                                    | 690           | J/m               | ASTM D256   |
| <b>Thermal</b>                                         |               |                   |             |
| Deflection Temperature Under Load Unannealed (264 psi) | 127           | °C                | ASTM D648   |
| Deflection Temperature Under Load Unannealed (66 psi)  | 129           | °C                | ASTM D648   |
| RTI Str                                                | 115           | °C                | UL 746B     |
| <b>UL Information</b>                                  |               |                   |             |
| Flame Rating                                           |               |                   |             |
| (1.5 mm)                                               | V-0           |                   | UL 94       |
| (3.0 mm)                                               | 5V            |                   | UL 94       |
| (2.5 mm)                                               | 5VA           |                   | UL 94       |

| Injection Parameters   | Nominal Value  | Units |
|------------------------|----------------|-------|
| Drying Time            | 4              | hr    |
| Drying Temperature     | 121            | °C    |
| Screw Speed            | 40 to 75       | rpm   |
| Processing (Melt) Temp | 282 to 299     | °C    |
| Front Temperature      | 249 to 299     | °C    |
| Middle Temperature     | 249 to 299     | °C    |
| Rear Temperature       | 249 to 299     | °C    |
| Injection Rate         | Slow-Moderate  |       |
| Back Pressure          | 0.345 to 0.689 | MPa   |
| Mold Temperature       | 71 to 104      | °C    |
| Cushion                | 6.35 to 12.7   | mm    |