

Technical Data Sheet

**Polyflam 12N4006NCBLK**



Polypropylene, Unspecified (PP, Unspecified)

**Product Description**

Medium Flow, High Impact, Flame Retardant Polypropylene

|                  |                        |
|------------------|------------------------|
| <b>Attribute</b> | High Impact Resistance |
| <b>Forms</b>     | Pellets                |
| <b>Additive</b>  | Flame Retardant        |

| Typical Properties                                    | Nominal Value | Units             | Test Method |
|---|---------------|-------------------|-------------|
| <b>Physical</b>                                       |               |                   |             |
| Melt Flow Rate, (230 °C/2.16 kg)                      | 6.5           | g/10 min          | ASTM D1238  |
| Density - Specific Gravity                            | 0.938         | g/cm <sup>3</sup> | ASTM D792   |
| <b>Mechanical</b>                                     |               |                   |             |
| Tensile Strength at Yield                             | 20.7          | MPa               | ASTM D638   |
| Flexural Modulus, (Tangent)                           | 1030          | MPa               | ASTM D790   |
| <b>Impact</b>   |               |                   |             |
| Notched Izod Impact                                   | No Break      |                   | ASTM D256   |
| <b>Thermal</b>  |               |                   |             |
| Deflection Temperature Under Load Unannealed (66 psi) | 82.2          | °C                | ASTM D648   |
| RTI Elec, (1.5 to 3.0 mm)                             | 115           | °C                | UL 746B     |
| RTI Imp, (1.5 to 3.0 mm)                              | 115           | °C                | UL 746B     |
| RTI Str, (1.5 to 3.0 mm)                              | 115           | °C                | UL 746B     |
| <b>UL Information</b>                                 |               |                   |             |
| Flame Rating  |               |                   |             |
| (1.5 mm)  | V-2           |                   | UL 94       |
| (3.0 mm)  | V-2           |                   | UL 94       |
| UL File Number  | E51193        |                   |             |

| Injection Parameters   | Nominal Value | Units |
|------------------------|---------------|-------|
| Drying Time            | 4             | hr    |
| Drying Temperature     | 82            | °C    |
| Nozzle Temperature     | 177 to 227    | °C    |
| Processing (Melt) Temp | 182 to 227    | °C    |
| Front Temperature      | 177 to 227    | °C    |
| Middle Temperature     | 177 to 227    | °C    |
| Rear Temperature       | 177 to 216    | °C    |
| Injection Rate         | Slow-Moderate |       |
| Back Pressure          | <0.689        | MPa   |
| Mold Temperature       | 32 to 66      | °C    |
| Cushion                | 6.35 to 12.7  | mm    |