

**General Information****Product Description**

Reinforced (40%); Flame Retardant, Non Br &amp; Non P; Low Warpage

**General**

|                        |                                     |                                                     |
|------------------------|-------------------------------------|-----------------------------------------------------|
| Filler / Reinforcement | • Glass Fiber, 40% Filler by Weight |                                                     |
| Additive               | • Flame Retardant                   |                                                     |
| Features               | • Bromine Free<br>• Flame Retardant | • Low (to None) Phosphorus Content<br>• Low Warpage |
| Uses                   | • General Purpose                   |                                                     |

**ASTM & ISO Properties <sup>1</sup>**

| Physical                                | Nominal Value | Unit              | Test Method     |
|-----------------------------------------|---------------|-------------------|-----------------|
| Density                                 | 1.52          | g/cm <sup>3</sup> | ISO 1183        |
| Molding Shrinkage                       |               |                   | Internal Method |
| Across Flow                             | 0.10 to 0.30  | %                 |                 |
| Flow                                    | 0.10 to 0.30  | %                 |                 |
| Water Absorption (Saturation, 23°C)     | 0.080         | %                 | ISO 62          |
| Mechanical                              | Nominal Value | Unit              | Test Method     |
| Tensile Stress (Break)                  | 85.0          | MPa               | ISO 527-2/5     |
| Tensile Strain (Break)                  | 2.8           | %                 | ISO 527-2/5     |
| Flexural Modulus <sup>2</sup>           | 8500          | MPa               | ISO 178         |
| Flexural Stress <sup>2</sup>            | 135           | MPa               | ISO 178         |
| Impact                                  | Nominal Value | Unit              | Test Method     |
| Charpy Notched Impact Strength (23°C)   | 7.0           | kJ/m <sup>2</sup> | ISO 179         |
| Charpy Unnotched Impact Strength (23°C) | 30            | kJ/m <sup>2</sup> | ISO 179         |
| Thermal                                 | Nominal Value | Unit              | Test Method     |
| Deflection Temperature Under Load       |               |                   |                 |
| 0.45 MPa, Unannealed                    | 142           | °C                | ISO 75-2/B      |
| 1.8 MPa, Unannealed                     | 138           | °C                | ISO 75-2/A      |
| Electrical                              | Nominal Value | Unit              | Test Method     |
| Comparative Tracking Index (CTI)        | PLC 4         |                   | UL 746A         |
| Flammability                            | Nominal Value | Unit              | Test Method     |
| Flame Rating (1.5 mm)                   | V-0           |                   | UL 94           |

**Processing Information**

| Injection                          | Nominal Value | Unit |
|------------------------------------|---------------|------|
| Drying Temperature - Hot Air Dryer | 120           | °C   |
| Drying Time - Hot Air Dryer        | 4.0 to 8.0    | hr   |
| Rear Temperature                   | 280 to 300    | °C   |



**Iupilon™ EGN2040DF**  
**Mitsubishi Engineering-Plastics Corp - Polycarbonate**

| Injection          | Nominal Value | Unit |
|--------------------|---------------|------|
| Middle Temperature | 280 to 300    | °C   |
| Front Temperature  | 280 to 300    | °C   |
| Nozzle Temperature | 280 to 300    | °C   |
| Mold Temperature   | 80 to 120     | °C   |

