

# Multilon® TN-7000F

TEIJIN LIMITED - Polycarbonate + ABS

## General Information

### Product Description

PC/ABS polymer alloy, Non-halogen type flame resistant series, Mineral filler reinforced

### General

|                        |                      |                               |                 |
|------------------------|----------------------|-------------------------------|-----------------|
| Filler / Reinforcement | • Mineral            |                               |                 |
| Properties             | • Flame Retardant    | • Halogen Free                | • High Rigidity |
| Uses                   | • Business Equipment | • Office Automation Equipment |                 |
| Forms                  | • Pellets            |                               |                 |
| Processing Method      | • Injection Molding  |                               |                 |

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

| Physical                                | Nominal Value | Unit              | Test Method     |
|-----------------------------------------|---------------|-------------------|-----------------|
| Density                                 | 1.22          | g/cm <sup>3</sup> | ISO 1183        |
| Molding Shrinkage                       |               |                   | Internal Method |
| Across Flow : 4.00 mm                   | 0.40 to 0.60  | %                 |                 |
| Flow : 4.00 mm                          | 0.40 to 0.60  | %                 |                 |
| Mechanical                              | Nominal Value | Unit              | Test Method     |
| Tensile Modulus (23°C)                  | 3300          | MPa               | ISO 527-1/1     |
| Tensile Stress (Yield, 23°C)            | 63.0          | MPa               | ISO 527-2/50    |
| Tensile Stress (Break, 23°C)            | 46.0          | MPa               | ISO 527-2/50    |
| Tensile Strain (Yield, 23°C)            | 2.0           | %                 | ISO 527-2/50    |
| Tensile Strain (Break, 23°C)            | 20            | %                 | ISO 527-2/50    |
| Flexural Modulus <sup>2</sup> (23°C)    | 3200          | MPa               | ISO 178         |
| Flexural Stress <sup>2</sup> (23°C)     | 96.0          | MPa               | ISO 178         |
| Impact                                  | Nominal Value | Unit              | Test Method     |
| Charpy Notched Impact Strength (23°C)   | 12            | kJ/m <sup>2</sup> | ISO 179         |
| Charpy Unnotched Impact Strength (23°C) | No Break      |                   | ISO 179         |
| Thermal                                 | Nominal Value | Unit              | Test Method     |
| Deflection Temperature Under Load       |               |                   | ISO 75-2/B      |
| 0.45 MPa, Unannealed                    | 94.0          | °C                |                 |
| Deflection Temperature Under Load       |               |                   | ISO 75-2/A      |
| 1.8 MPa, Unannealed                     | 84.0          | °C                |                 |
| Vicat Softening Temperature             | 97.0          | °C                | ISO 306/B50     |
| CLTE - Flow                             | 6.0E-5        | cm/cm/°C          | ISO 11359-2     |
| CLTE - Transverse                       | 7.0E-5        | cm/cm/°C          | ISO 11359-2     |
| RTI Elec (1.2 mm)                       | 60.0          | °C                | UL 746B         |
| RTI Imp (1.2 mm)                        | 60.0          | °C                | UL 746B         |
| RTI Str (1.2 mm)                        | 60.0          | °C                | UL 746B         |
| Electrical                              | Nominal Value | Unit              | Test Method     |
| Surface Resistivity                     | 1.0E+16       | ohms              | IEC 60093       |

Multilon® TN-7000F

TEIJIN LIMITED - Polycarbonate + ABS

| Flammability | Nominal Value | Unit | Test Method |
|--------------|---------------|------|-------------|
| Flame Rating |               |      | UL 94       |
| 1.2 mm       |               | V-0  |             |
| 1.8 mm       |               | 5VB  |             |

| Processing Information |               |      |  |
|------------------------|---------------|------|--|
| Injection              | Nominal Value | Unit |  |
| Drying Temperature     | 80            | °C   |  |
| Drying Time            | 5.0 to 8.0    | hr   |  |
| Processing (Melt) Temp | 230 to 270    | °C   |  |
| Mold Temperature       | 50 to 70      | °C   |  |

Notes

- <sup>1</sup> Typical properties: these are not to be construed as specifications.
- <sup>2</sup> 2.0 mm/min