

## Iupilon™ MB2105

Mitsubishi Engineering-Plastics Corp - Polycarbonate + Polyester

| General Information                        |                      |           |                 |
|--------------------------------------------|----------------------|-----------|-----------------|
| Product Description                        |                      |           |                 |
| PC/POLYESTER, Chemical Resistant           |                      |           |                 |
| General                                    |                      |           |                 |
| Features                                   | • Chemical Resistant |           |                 |
| Uses                                       | • General Purpose    |           |                 |
| ASTM & ISO Properties <sup>1</sup>         |                      |           |                 |
| Physical                                   | Nominal Value        | Unit      | Test Method     |
| Density                                    | 1.22                 | g/cm³     | ISO 1183        |
| Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)   | 7.0                  | g/10 min  | ISO 1133        |
| Melt Volume-Flow Rate (MVR) (300°C/1.2 kg) | 7.0                  | cm³/10min | ISO 1133        |
| Molding Shrinkage                          |                      |           | Internal Method |
| Across Flow                                | 0.60 to 0.80         | %         |                 |
| Flow                                       | 0.60 to 0.80         | %         |                 |
| Water Absorption (24 hr, 23°C)             | 0.20                 | %         | Internal Method |
| Mechanical                                 | Nominal Value        | Unit      | Test Method     |
| Tensile Modulus                            | 2300                 | MPa       | ISO 527-1/1     |
| Tensile Stress (Yield)                     | 57.0                 | MPa       | ISO 527-2/50    |
| Tensile Strain                             |                      |           | ISO 527-2/50    |
| Yield                                      | 5.2                  | %         |                 |
| Break                                      | 90                   | %         |                 |
| Flexural Modulus <sup>2</sup>              | 2300                 | MPa       | ISO 178         |
| Flexural Stress <sup>2</sup>               | 90.0                 | MPa       | ISO 178         |
| Impact                                     | Nominal Value        | Unit      | Test Method     |
| Charpy Notched Impact Strength (23°C)      | 70                   | kJ/m²     | ISO 179         |
| Charpy Unnotched Impact Strength (23°C)    | No Break             |           | ISO 179         |
| Thermal                                    | Nominal Value        | Unit      | Test Method     |
| Deflection Temperature Under Load          |                      |           |                 |
| 0.45 MPa, Unannealed                       | 136                  | °C        | ISO 75-2/B      |
| 1.8 MPa, Unannealed                        | 112                  | °C        | ISO 75-2/A      |
| CLTE                                       |                      |           | ISO 11359-2     |
| Flow                                       | 6.0E-5               | cm/cm/°C  |                 |
| Transverse                                 | 7.0E-5               | cm/cm/°C  |                 |
| Processing Information                     |                      |           |                 |
| Injection                                  | Nominal Value        | Unit      |                 |
| Drying Temperature - Hot Air Dryer         | 120                  | °C        |                 |
| Drying Time - Hot Air Dryer                | 4.0 to 8.0           | hr        |                 |
|                                            | 270 to 290           | °C        |                 |



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| Injection          | Nominal Value | Unit |
|--------------------|---------------|------|
| Middle Temperature | 270 to 290    | °C   |
| Front Temperature  | 270 to 290    | °C   |
| Nozzle Temperature | 270 to 290    | °C   |
| Mold Temperature   | 60 to 90      | °C   |

