

## Iupilon™ E-2000VUR

Mitsubishi Engineering-Plastics Corp - Polycarbonate

### General Information

#### Product Description

Extrusion, UV stabilized, Mold release improved

#### General

|                   |                           |                    |                 |
|-------------------|---------------------------|--------------------|-----------------|
| Additive          | • UV Stabilizer           |                    |                 |
| Features          | • Good Mold Release       | • High Viscosity   | • UV Stabilized |
|                   | • Good Weather Resistance | • Light Stabilized |                 |
| Uses              | • General Purpose         |                    |                 |
| Processing Method | • Extrusion               |                    |                 |

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

| Physical                                   | Nominal Value | Unit                   | Test Method     |
|--------------------------------------------|---------------|------------------------|-----------------|
| Density                                    | 1.20          | g/cm <sup>3</sup>      | ISO 1183        |
| Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)   | 5.3           | g/10 min               | ISO 1133        |
| Melt Volume-Flow Rate (MVR) (300°C/1.2 kg) | 5.0           | cm <sup>3</sup> /10min | ISO 1133        |
| Molding Shrinkage                          |               |                        | Internal Method |
| Across Flow                                | 0.50 to 0.70  | %                      |                 |
| Flow                                       | 0.50 to 0.70  | %                      |                 |
| Water Absorption (24 hr, 23°C)             | 0.24          | %                      | Internal Method |
| Mechanical                                 | Nominal Value | Unit                   | Test Method     |
| Tensile Modulus                            | 2400          | MPa                    | ISO 527-1/1     |
| Tensile Stress (Yield)                     | 60.0          | MPa                    | ISO 527-2/50    |
| Tensile Strain                             |               |                        | ISO 527-2/50    |
| Yield                                      | 5.4           | %                      |                 |
| Break                                      | 110           | %                      |                 |
| Flexural Modulus <sup>2</sup>              | 2300          | MPa                    | ISO 178         |
| Flexural Stress <sup>2</sup>               | 93.0          | MPa                    | ISO 178         |
| Impact                                     | Nominal Value | Unit                   | Test Method     |
| Charpy Notched Impact Strength (23°C)      | 88            | 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          |               |                        |                 |
| 0.45 MPa, Unannealed                       | 145           | °C                     | ISO 75-2/B      |
| 1.8 MPa, Unannealed                        | 131           | °C                     | ISO 75-2/A      |
| CLTE                                       |               |                        | ISO 11359-2     |
| Flow                                       | 6.5E-5        | cm/cm/°C               |                 |
| Transverse                                 | 6.6E-5        | cm/cm/°C               |                 |



# Iupilon™ E-2000VUR

## Mitsubishi Engineering-Plastics Corp - Polycarbonate

| Electrical                       | Nominal Value | Unit    | Test Method |
|----------------------------------|---------------|---------|-------------|
| Surface Resistivity              | 6.0E+15       | ohms    | IEC 60093   |
| Volume Resistivity               | 3.0E+16       | ohms·cm | IEC 60093   |
| Electric Strength                |               |         | IEC 60243-1 |
| 1.00 mm                          | 31            | kV/mm   |             |
| 3.00 mm                          | 18            | kV/mm   |             |
| Dielectric Constant              |               |         | IEC 60250   |
| 1 MHz                            | 3.10          |         |             |
| 100 MHz                          | 3.10          |         |             |
| Dissipation Factor               |               |         | IEC 60250   |
| 1 MHz                            | 9.0E-3        |         |             |
| 100 MHz                          | 6.0E-4        |         |             |
| Comparative Tracking Index (CTI) | PLC 2         |         | UL 746A     |
| Flammability                     | Nominal Value | Unit    | Test Method |
| Flame Rating                     |               |         | UL 94       |
| 0.38 mm                          | V-2           |         |             |
| 1.5 mm                           | V-2           |         |             |
| 3.0 mm                           | V-2           |         |             |

### 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 310    | °C   |
| Middle Temperature                 | 280 to 310    | °C   |
| Front Temperature                  | 280 to 310    | °C   |
| Nozzle Temperature                 | 280 to 310    | °C   |
| Mold Temperature                   | 80 to 110     | °C   |

