

## Iuplace™ JBS70

Mitsubishi Engineering-Plastics Corp - Polyphenylene Ether + PS

| General Information                         |                                                       |                                                           |                 |
|---------------------------------------------|-------------------------------------------------------|-----------------------------------------------------------|-----------------|
| Product Description                         |                                                       |                                                           |                 |
| V-0                                         |                                                       |                                                           |                 |
| General                                     |                                                       |                                                           |                 |
| Features                                    | • Flame Retardant                                     |                                                           |                 |
| Uses                                        | • Automotive Applications<br>• Automotive Electronics | • Electrical/Electronic Applications<br>• General Purpose |                 |
| ASTM & ISO Properties <sup>1</sup>          |                                                       |                                                           |                 |
| Physical                                    | Nominal Value                                         | Unit                                                      | Test Method     |
| Density                                     | 1.10                                                  | g/cm³                                                     | ISO 1183        |
| Melt Volume-Flow Rate (MVR) (300°C/2.16 kg) | 7.5                                                   | cm³/10min                                                 | ISO 1133        |
| Molding Shrinkage                           |                                                       |                                                           | Internal Method |
| Across Flow : 3.20 mm                       | 0.50 to 0.70                                          | %                                                         |                 |
| Flow : 3.20 mm                              | 0.50 to 0.70                                          | %                                                         |                 |
| Water Absorption (Saturation, 23°C)         | 0.070                                                 | %                                                         | ISO 62          |
| Mechanical                                  | Nominal Value                                         | Unit                                                      | Test Method     |
| Tensile Modulus                             | 2400                                                  | MPa                                                       | ISO 527-1/1     |
| Tensile Stress (Yield)                      | 70.0                                                  | MPa                                                       | ISO 527-2/50    |
| Tensile Strain                              |                                                       |                                                           | ISO 527-2/50    |
| Yield                                       | 5.0                                                   | %                                                         |                 |
| Break                                       | 20                                                    | %                                                         |                 |
| Flexural Modulus <sup>2</sup>               | 2400                                                  | MPa                                                       | ISO 178         |
| Flexural Stress <sup>2</sup>                | 105                                                   | MPa                                                       | ISO 178         |
| Impact                                      | Nominal Value                                         | Unit                                                      | Test Method     |
| Charpy Notched Impact Strength (23°C)       | 26                                                    | kJ/m²                                                     | 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                         | 130                                                   | °C                                                        | ISO 75-2/A      |
| CLTE                                        |                                                       |                                                           | ISO 11359-2     |
| Flow                                        | 5.5E-5                                                | cm/cm/°C                                                  |                 |
| Transverse                                  | 5.8E-5                                                | cm/cm/°C                                                  |                 |
| Electrical                                  | Nominal Value                                         | Unit                                                      | Test Method     |
| Surface Resistivity                         | 2.0E+15                                               | ohms                                                      | IEC 60093       |
| Volume Resistivity                          | 3.0E+16                                               | ohms·cm                                                   | IEC 60093       |
| Comparative Tracking Index                  | > 250                                                 | V                                                         | IEC 60112       |



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| Flammability | Nominal Value | Unit | Test Method |
|--------------|---------------|------|-------------|
| Flame Rating |               |      | UL 94       |
| 0.75 mm      |               | V-0  |             |
| 2.0 mm       |               | 5VA  |             |
| 2.5 mm       |               | 5VA  |             |

| Processing Information             |               |      |  |
|------------------------------------|---------------|------|--|
| Injection                          | Nominal Value | Unit |  |
| Drying Temperature - Hot Air Dryer | 100 to 120    | °C   |  |
| Drying Time - Hot Air Dryer        | 2.0 to 4.0    | hr   |  |
| Rear Temperature                   | 250 to 280    | °C   |  |
| Middle Temperature                 | 270 to 300    | °C   |  |
| Front Temperature                  | 270 to 300    | °C   |  |
| Nozzle Temperature                 | 270 to 300    | °C   |  |
| Mold Temperature                   | 80 to 110     | °C   |  |
| Injection Pressure                 | 20.0 to 150   | MPa  |  |
| Injection Rate                     | Moderate      |      |  |
| Screw Speed                        | 60 to 150     | rpm  |  |

