



## Product Data Sheet & General Processing Conditions

### ZOVGOV® PP M10G5 Polypropylene (PP) Glass Fiber

#### PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

| PERMANENCE                                   | English               | SI Metric            | ASTM TEST |
|--|-----------------------|----------------------|-----------|
| Primary Additive                             | 25 %                  | 25 %                 |           |
| Specific Gravity                             | 1.08                  | 1.08                 | D 792     |
| Melt Flow Rate<br>@ 230 °C, / 2.16 kg        | 2.50 - 2.50 g/10 min  | 2.50 - 2.50 g/10 min | D 1238    |
| Molding Shrinkage<br>1/8 in (3.2 mm) section | 0.0010 - 0.0040 in/in | 0.10 - 0.40 %        | D 955     |
| Water Absorption, 24 hrs @ 23°C              | 0.010 %               | 0.010 %              | D 570     |

#### MECHANICAL

|  |                            |             |        |
|--|----------------------------|-------------|--------|
| Impact Strength, Izod<br>notched 1/8 in (3.2 mm) section | 1.0 ft-lbs/in              | 53 J/m      | D 256  |
| unnotched 1/8 in (3.2 mm) section                        | 5.0 ft-lbs/in              | 267 J/m     | D 4812 |
| Tensile Strength   | 7600 psi                   | 52 MPa      | D 638  |
| Tensile Elongation                                       | 2.0 - 3.0 %                | 2.0 - 3.0 % | D 638  |
| Tensile Modulus  | 0.85 x 10 <sup>6</sup> psi | 5861 MPa    | D 638  |
| Flexural Strength  | 11500 psi                  | 79 MPa      | D 790  |
| Flexural Modulus   | 0.60 x 10 <sup>6</sup> psi | 4137 MPa    | D 790  |

#### ELECTRICAL

|                                  |               |               |       |
|----------------------------------|---------------|---------------|-------|
| Dielectric Strength, S/T, in oil | 530 VPM       | 20.9 kV/mm    | D 149 |
| Dielectric Constant, 1 MHz, Dry  | 2.8           | 2.8           | D 150 |
| Dissipation Factor, 1 MHz, Dry   | 0.0010        | 0.0010        | D 150 |
| Volume Resistivity               | > 1E15 ohm.cm | > 1E15 ohm.cm | D 257 |

#### THERMAL

|  |              |             |       |
|--|--------------|-------------|-------|
| Deflection Temperature<br>@ 264 psi (1820 kPa) | 290 °F       | 143 °C      | D 648 |
| @ 66 psi (455 kPa)                             | 310 °F       | 154 °C      | D 648 |
| Ignition Resistance*<br>Flammability           | HB @ 1/16 in | HB @ 1.5 mm | UL94  |

#### PROPERTY NOTES

Data herein is typical and not to be construed as specifications.

Unless otherwise specified, all data listed is for natural or black colored materials. Pigments can affect properties.

\* This rating is not intended to reflect hazards of this or any other material under actual fire conditions.

#### GENERAL PROCESSING FOR INJECTION MOLDING

|                    | English           | SI Metric     |
|--------------------|-------------------|---------------|
| Injection Pressure | 10000 - 15000 psi | 69 - 103 MPa  |
| Melt Temperature   | 375 - 450 °F      | 191 - 232 °C  |
| Mold Temperature   | 90 - 150 °F       | 32 - 66 °C    |
| Drying             | 2 hrs @ 175 °F    | 2 hrs @ 79 °C |

#### PROCESSING NOTES