



**Product Data Sheet &
General Processing Conditions**

**ZOVGOV® M100C6
Polyetherimide (PEI)
Carbon Fiber**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

| PERMANENCE | English | SI Metric | ASTM TEST |
|--|----------------|------------------|------------------|
| Primary Additive | 30 % | 30 % | |
| Specific Gravity | 1.39 | 1.39 | D 792 |
| Molding Shrinkage 1/8 in (3.2 mm) section | 0.0005 in/in | 0.05 % | D 955 |
| Water Absorption, 24 hrs @ 23°C | 0.180 % | 0.180 % | D 570 |

MECHANICAL

| | | | |
|--|----------------------------|-----------|--------|
| Impact Strength, Izod notched 1/8 in (3.2 mm) section | 1.2 ft-lbs/in | 64 J/m | D 256 |
| unnotched 1/8 in (3.2 mm) section | 9.5 ft-lbs/in | 507 J/m | D 4812 |
| Tensile Strength | 31000 psi | 214 MPa | D 638 |
| Tensile Elongation | 1.5 % | 1.5 % | D 638 |
| Tensile Modulus | 3.00 x 10 ⁶ psi | 20685 MPa | D 638 |
| Flexural Strength | 43000 psi | 296 MPa | D 790 |
| Flexural Modulus | 2.60 x 10 ⁶ psi | 17927 MPa | D 790 |

ELECTRICAL

| | | | |
|--------------------|--------------|--------------|-------|
| Volume Resistivity | < 1E3 ohm.cm | < 1E3 ohm.cm | D 257 |
|--------------------|--------------|--------------|-------|

THERMAL

| | | | |
|--|---------------|--------------|--------|
| Deflection Temperature @ 264 psi (1820 kPa) | 405 °F | 207 °C | D 648 |
| @ 66 psi (455 kPa) | 410 °F | 210 °C | D 648 |
| Ignition Resistance* Flammability** | V-0 @ 1/16 in | V-0 @ 1.5 mm | D 3801 |

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.

** Values per MOLAN Company testing.

GENERAL PROCESSING FOR INJECTION MOLDING

| | English | SI Metric |
|--------------------|-------------------|------------------|
| Injection Pressure | 12000 - 18000 psi | 83 - 124 MPa |
| Melt Temperature | 670 - 750 °F | 354 - 399 °C |
| Mold Temperature | 275 - 350 °F | 135 - 177 °C |
| Drying | 4 hrs @ 300 °F | 4 hrs @ 149 °C |
| Moisture Content | 0.04 % | 0.04 % |
| Dew Point | -20 °F | -29 °C |

PROCESSING NOTES

Desiccant Type Dryer Required.