



**Product Data Sheet &
General Processing Conditions**

**ZOVGOV® M22
Nylon 6 (PA)
Unreinforced**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Specific Gravity	1.13	1.13	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0130 - 0.0170 in/in	1.30 - 1.70 %	D 955
Water Absorption, 24 hrs @ 23°C	1.900 %	1.900 %	D 570

MECHANICAL

Impact Strength, Izod notched 1/8 in (3.2 mm) section	0.8 ft-lbs/in	43 J/m	D 256
unnotched 1/8 in (3.2 mm) section	No Break	No Break	D 4812
Tensile Strength	11000 psi	76 MPa	D 638
Tensile Elongation	> 10.0 %	> 10.0 %	D 638
Tensile Modulus	0.40 x 10 ⁶ psi	2758 MPa	D 638
Flexural Strength	16000 psi	110 MPa	D 790
Flexural Modulus	0.43 x 10 ⁶ psi	2965 MPa	D 790
Hardness Rockwell, R	116	116	D 785

ELECTRICAL

Dielectric Strength, S/T, in oil	400 VPM	15.7 kV/mm	D 149
Dielectric Constant, 1 MHz, Dry	3.4	3.4	D 150
Dissipation Factor, 1 MHz, Dry	0.0300	0.0300	D 150
Volume Resistivity	> 1E11 ohm.cm	> 1E11 ohm.cm	D 257

THERMAL

Deflection Temperature @ 264 psi (1820 kPa)	160 °F	71 °C	D 648
@ 66 psi (455 kPa)	340 °F	171 °C	D 648
Ignition Resistance*			
Flammability	V-2 @ 1/32 in	V-2 @ 0.8 mm	UL94
Flammability	HB @ 1/32 in	HB @ 0.8 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	470 - 535 °F	243 - 279 °C
Mold Temperature	130 - 200 °F	54 - 93 °C
Drying	2 hrs @ 180 °F	2 hrs @ 82 °C
Moisture Content	0.20 %	0.20 %
Dew Point	0 °F	-18 °C

PROCESSING NOTES

Desiccant Type Dryer Required.

This information is intended to be used only as a guideline for designers and processors of modified thermoplastics. Because design and processing is complex, a set solution will not solve all problems. Observation on a "trial and error" basis may be required to achieve desired results.