



## Product Data Sheet & General Processing Conditions

### ZOVGOV® M20MD5 Nylon 6/6 (PA) Molybdenum Disulfide

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

PERMANENCE	English	SI Metric	ASTM TEST
Specific Gravity	1.18	1.18	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0100 - 0.0150 in/in	1.00 - 1.50 %	D 955

#### 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	22.0 ft-lbs/in	1175 J/m	D 4812
Tensile Strength	12500 psi	86 MPa	D 638
Tensile Elongation	5.0 - 8.0 %	5.0 - 8.0 %	D 638
Tensile Modulus	0.55 x 10 <sup>6</sup> psi	3792 MPa	D 638
Flexural Strength	18500 psi	128 MPa	D 790
Flexural Modulus	0.55 x 10 <sup>6</sup> psi	3792 MPa	D 790

#### ELECTRICAL

Volume Resistivity	1E14 - 1E16 ohm.cm	1E14 - 1E16 ohm.cm	D 257
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#### THERMAL

Deflection Temperature @ 264 psi (1820 kPa)	210 °F	99 °C	D 648
Ignition Resistance* Flammability**	HB @ 1/16 in	HB @ 1.5 mm	D 635

#### 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	10000 - 18000 psi	69 - 124 MPa
Melt Temperature	530 - 570 °F	277 - 299 °C
Mold Temperature	150 - 225 °F	66 - 107 °C
Drying	4 hrs @ 175 °F	4 hrs @ 79 °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.

Data are obtained from specimens molded under carefully controlled conditions from representative samples of the compound described herein.