



Product Data Sheet & General Processing Conditions

ZOVGOV® M50G2 90A Ester-based Thermoplastic Polyurethane Elastomer (TPUR/TPU) Glass Fiber

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Primary Additive	10 %	10 %	
Specific Gravity	1.27	1.27	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0010 - 0.0030 in/in	0.10 - 0.30 %	D 955
MECHANICAL			
Impact Strength, Izod notched 1/8 in (3.2 mm) section	12.3 ft-lbs/in	657 J/m	D 256
unnotched 1/8 in (3.2 mm) section	17.0 ft-lbs/in	908 J/m	D 4812
Tensile Strength	2500 psi	17 MPa	D 638
Tensile Elongation	> 10.0 %	> 10.0 %	D 638
Tensile Modulus	0.05 x 10 ⁶ psi	345 MPa	D 638
Flexural Strength	1400 psi	10 MPa	D 790
Flexural Modulus	0.04 x 10 ⁶ psi	276 MPa	D 790
Hardness			
Shore A, 10 s delay	85	85	D 2240
Shore D, instantaneous	55	55	D 2240
THERMAL			
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 - 15000 psi	69 - 103 MPa
Melt Temperature	365 - 425 °F	185 - 218 °C
Mold Temperature	60 - 140 °F	16 - 60 °C
Drying	2 - 3 hrs @ 200 °F	2 - 3 hrs @ 93 °C
Moisture Content	0.01 %	0.01 %

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.