



Product Data Sheet & General Processing Conditions

ZOVGOV® M21HF Polycarbonate (PC)

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Specific Gravity	1.20	1.20	D 792
Melt Flow Rate @ 300 °C, / 1.2 kg	20.00 g/10 min	20.00 g/10 min	D 1238
Molding Shrinkage 1/8 in (3.2 mm) section	0.0050 - 0.0070 in/in	0.50 - 0.70 %	D 955
Water Absorption, 24 hrs @ 23°C	0.150 %	0.150 %	D 570

MECHANICAL

Impact Strength, Izod notched 1/8 in (3.2 mm) section	14.0 ft-lbs/in	747 J/m	D 256
unnotched 1/8 in (3.2 mm) section	No Break	No Break	D 4812
Tensile Strength	9100 psi	63 MPa	D 638
Tensile Elongation	10.0 %	10.0 %	D 638
Tensile Modulus	0.35 x 10 ⁶ psi	2413 MPa	D 638
Flexural Strength	12000 psi	83 MPa	D 790
Flexural Modulus	0.33 x 10 ⁶ psi	2275 MPa	D 790

THERMAL

Deflection Temperature @ 264 psi (1820 kPa)	259 °F	126 °C	D 648
@ 66 psi (455 kPa)	273 °F	134 °C	D 648
Ignition Resistance* Flammability**	HB @ 1/32 in	HB @ 0.8 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	550 - 600 °F	288 - 316 °C
Mold Temperature	180 - 250 °F	82 - 121 °C
Drying	4 hrs @ 250 °F	4 hrs @ 121 °C
Moisture Content	0.02 %	0.02 %
Dew Point	-20 °F	-29 °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.