

## TYPICAL PROPERTIES

# VESPEL® TP- 8792



### THERMOPLASTIC PARTS FOR HIGH-TEMPERATURE APPLICATIONS

Vespel® TP-8792 is a carbon fiber and PTFE filled thermoplastic polyimide that offers outstanding mechanical, thermal, and tribological performance. This grade also provides excellent strength and toughness, dimensional stability, low outgassing, radiation resistance, creep resistance, and low coefficient of thermal expansion.

As part of the Vespel® parts and shapes product line, injection-molded Vespel® TP-8792 parts comply with the highest quality standards required in the industry.

MECHANICAL		TEST METHOD	SI UNITS	ENGLISH UNITS
TENSILE STRENGTH	23°C/73°F	ASTM D-638	170 MPa	24,600 psi
TENSILE ELONGATION	23°C/73°F	ASTM D-638	5%	5%
FLEXURAL STRENGTH	23°C/73°F	ASTM D-790	230 MPa	33,300 psi
FLEXURAL MODULUS	23°C/73°F	ASTM D-790	10.8 GPa	1,600,000 psi
NOTCHED IZOD 3.175 mm/1/8 in.	23°C/73°F	ASTM D-256	110 J/m	2.0 ft. lb./in.

THERMAL	TEST METHOD	SI UNITS	ENGLISH UNITS
HDT @ 1.8 MPa (264 psi)	ASTM D-648	246°C	475°F
CTE (23-150°C/73-302°F) FLOW DIRECTION	ASTM D-570	0.57x10 <sup>-5</sup> cm/cm/°C	0.32x10 <sup>-5</sup> in./in./°F
CTE (23-150°C/73-302°F) TRANSVERSE DIRECTION	ASTM D-570	5.2x10 <sup>-5</sup> cm/cm/°C	2.9x10 <sup>-5</sup> in./in./°F

OTHER PROPERTIES	TEST METHOD	SI UNITS	ENGLISH UNITS
SPECIFIC GRAVITY	ASTM D-792	1.44	1.44
WATER ABSORPTION (24 hrs. @ 23°C/73°F)	ASTM D-570	0.20%	0.20%

## For more information about DuPont™ Vespel®:

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Caution: Do not use in medical applications involving permanent implantation in the human body. For other medical applications, see "DuPont Medical Caution Statement."