

TYPICAL PROPERTIES

VESPEL® TP- 8474



MECHANICAL		TEST METHOD	SI UNITS	ENGLISH UNITS
TENSILE STRENGTH	23°C/73°F 150°C/302°F	ASTM D-638	229 MPa 144 MPa	33,300 psi 20,500 psi
TENSILE ELONGATION	23°C/73°F 150°C/302°F	ASTM D-638	2% 4%	2% 4%
FLEXURAL STRENGTH	23°C/73°F 150°C/302°F	ASTM D-790	314 MPa 216 MPa	45,600 psi 31,300 psi
FLEXURAL MODULUS	23°C/73°F 150°C/302°F	ASTM D-790	17.2 GPa 15.2 GPa	2,500,000 psi 2,200,000 psi
COMPRESSIVE STRENGTH	23°C/73°F 150°C/302°F	JIS K-7208	207 MPa 102 MPa	30,000 psi 14,800 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	248°C	478°F
CTE (23-150°C/73-302°F) FLOW DIRECTION	ASTM E-228	0.6x10 ⁻⁵ cm/cm/°C	0.3x10 ⁻⁵ in./in./°F
CTE (23-150°C/73-302°F) TRANSVERSE DIRECTION	ASTM E-228	4.7x10 ⁻⁵ cm/cm/°C	2.6x10 ⁻⁵ in./in./°F

THERMOPLASTIC PARTS FOR HIGH-LOAD APPLICATIONS

Vespel® TP-8474 is a carbon fiber filled thermoplastic polyimide that offers a unique balance of mechanical, thermal, and tribological properties. This grade also exhibits 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-8474 parts comply with the highest quality standards required in the industry.

OTHER PROPERTIES	TEST METHOD	SI UNITS	ENGLISH UNITS
SPECIFIC GRAVITY	ASTM D-792	1.42	1.42
WATER ABSORPTION (24 hrs. @ 23°C/73°F)	ASTM D-570	0.23%	0.23%



The miracles of science™

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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."