

## TYPICAL PROPERTIES

# VESPEL® TP- 8556



### THERMOPLASTIC PARTS FOR HIGH-TEMPERATURE- RESISTANT PARTS

VespeL® TP-8556 is a thermoplastic polyimide specifically designed for high-performance wear and friction applications in externally lubricated conditions.

And of course, as part of the VespeL® parts and shapes product line, injection-molded VespeL® TP-8556 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	142 MPa	20,600 psi
ELONGATION AT BREAK	23°C/73°F	ASTM D-638	1.9%	1.9%
FLEXURAL STRENGTH	23°C/73°F	ASTM D-790	182 MPa	26,400 psi
FLEXURAL MODULUS	23°C/73°F	ASTM D-790	9.6 GPa	1,400,000 psi
COMPRESSIVE STRENGTH	23°C/73°F	ASTM D-695	163 MPa	23,600 psi
COMPRESSIVE MODULUS	23°C/73°F	ASTM D-695	13.7 GPa	1,990,000 psi
NOTCHED IZOD 3.175 mm/1/8 in.	23°C/73°F	ASTM D-256	64 J/m	1.2 ft. lb./in.
UNNOTCHED IZOD	23°C/73°F	ASTM D-256	331 J/m	6.2 ft. lb./in.

THERMAL	TEST METHOD	SI UNITS	ENGLISH UNITS
HDT @ 1.8 MPa (264 psi)	ASTM D-648	244°C	471°F
CTE (23-150°C/73-302°F) FLOW DIRECTION	ASTM E-228	0.8x10 <sup>-5</sup> cm/cm/°C	0.44x10 <sup>-5</sup> in./in./°F
CTE (23-150°C/73-302°F) TRANSVERSE DIRECTION	ASTM E-228	3.6x10 <sup>-5</sup> cm/cm/°C	2.00x10 <sup>-5</sup> in./in./°F

OTHER PROPERTIES	TEST METHOD	SI UNITS	ENGLISH UNITS
SPECIFIC GRAVITY	ASTM D-792	1.46	1.46
WATER ABSORPTION (24 hrs. @ 23°C/73°F)	ASTM D-570	0.2	0.2



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."