



Product Data Sheet & General Processing Conditions

RTP 2299 X 91191 Polyetheretherketone (PEEK) Encapsulation Grade

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Specific Gravity	1.82	1.82	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0020 - 0.0040 in/in	0.20 - 0.40 %	D 955

MECHANICAL

Impact Strength, Izod notched 1/8 in (3.2 mm) section	1.4 ft-lbs/in	75 J/m	D 256
unnotched 1/8 in (3.2 mm) section	8.5 ft-lbs/in	454 J/m	D 4812
Tensile Strength	20500 psi	141 MPa	D 638
Tensile Elongation	1.0 - 2.0 %	1.0 - 2.0 %	D 638
Tensile Modulus	2.40 x 10 ⁶ psi	16548 MPa	D 638
Flexural Strength	30000 psi	207 MPa	D 790
Flexural Modulus	2.30 x 10 ⁶ psi	15858 MPa	D 790

ELECTRICAL

Dielectric Constant, 1 MHz, Dry	4.1	4.1	D 150
---------------------------------	-----	-----	-------

THERMAL

Ignition Resistance* Flammability**	V-0 @ 1/16 in	V-0 @ 1.5 mm	D 3801
--	---------------	--------------	--------

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 RTP Company testing.

GENERAL PROCESSING FOR INJECTION MOLDING

	English	SI Metric
Injection Pressure	12000 - 18000 psi	83 - 124 MPa
Melt Temperature	660 - 750 °F	349 - 399 °C
Mold Temperature	325 - 425 °F	163 - 218 °C
Drying	3 hrs @ 300 °F	3 hrs @ 149 °C
Moisture Content	0.10 %	0.10 %
Dew Point	-20 °F	-29 °C

PROCESSING NOTES

Desiccant Type Dryer Required.