



**Product Data Sheet &  
General Processing Conditions**

**RTP 2299 X 53538  
Polyetheretherketone (PEEK)  
Carbon Fiber  
Ablative Compound**

RTP Company's ablative compounds are formulated to develop a char when exposed to an open flame. The char acts as an insulating layer and reduces the damage and deformation to the material.

**PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS**

<b>PERMANENCE</b>	<b>English</b>	<b>SI Metric</b>	<b>ASTM TEST</b>
Specific Gravity	1.56	1.56	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0015 in/in	0.15 %	D 955

**MECHANICAL**

Impact Strength, Izod notched 1/8 in (3.2 mm) section	0.8 ft-lbs/in	43 J/m	D 256
unnotched 1/8 in (3.2 mm) section	9.0 ft-lbs/in	481 J/m	D 4812
Tensile Strength	25000 psi	172 MPa	D 638
Tensile Elongation	1.5 %	1.5 %	D 638
Tensile Modulus	2.40 x 10 <sup>6</sup> psi	16548 MPa	D 638
Flexural Strength	36500 psi	252 MPa	D 790
Flexural Modulus	2.10 x 10 <sup>6</sup> psi	14480 MPa	D 790

**ELECTRICAL**

Volume Resistivity	< 1E7 ohm.cm	< 1E7 ohm.cm	D 257
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**THERMAL**

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

	<b>English</b>	<b>SI Metric</b>
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.

21 Mar 2018 BXW

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.

Data are obtained from specimens molded under carefully controlled conditions from representative samples of the compound described herein. Properties may be materially affected by molding techniques applied and by the size and shape of the item molded. No assurance can be implied that all molded articles will have the same properties as those listed.

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