




**Product Data Sheet &
General Processing Conditions**

**RTP 4005 SI 2 HB
Polyphthalamide (PPA)
Glass Fiber
Silicone Lubricated
UL94 HB**



PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Primary Additive	30 %	30 %	
Specific Gravity	1.42	1.42	D 792
Molding Shrinkage			
1/8 in (3.2 mm) section	0.0015 - 0.0035 in/in	0.15 - 0.35 %	D 955
Water Absorption, 24 hrs @ 23°C	0.230 %	0.230 %	D 570

MECHANICAL

Impact Strength, Izod			
notched 1/8 in (3.2 mm) section	1.5 ft-lbs/in	80 J/m	D 256
unnotched 1/8 in (3.2 mm) section	14.0 ft-lbs/in	747 J/m	D 4812
Tensile Strength	27000 psi	186 MPa	D 638
Tensile Elongation	1.5 - 2.5 %	1.5 - 2.5 %	D 638
Tensile Modulus	1.70 x 10 ⁶ psi	11722 MPa	D 638
Flexural Strength	36000 psi	248 MPa	D 790
Flexural Modulus	1.50 x 10 ⁶ psi	10342 MPa	D 790
Hardness			
Rockwell, R	125	125	D 785

ELECTRICAL

Volume Resistivity	> 1E15 ohm.cm	> 1E15 ohm.cm	D 257
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THERMAL

Deflection Temperature			
@ 264 psi (1820 kPa)	510 °F	266 °C	D 648
Ignition Resistance*			
Flammability	HB @ 1/16 in	HB @ 1.5 mm	UL94

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.

GENERAL PROCESSING FOR INJECTION MOLDING

	English	SI Metric
Injection Pressure	10000 - 18000 psi	69 - 124 MPa
Melt Temperature	575 - 625 °F	302 - 329 °C
Mold Temperature	275 - 325 °F	135 - 163 °C
Drying	4 - 6 hrs @ 225 °F	4 - 6 hrs @ 107 °C
Moisture Content	0.05 %	0.05 %
Dew Point	-25 °F	-32 °C

PROCESSING NOTES

Desiccant Type Dryer Required.