



**Product Data Sheet &
General Processing Conditions**

**RTP 2305 A FR
Rigid Thermoplastic Polyurethane
(RTPU)
Glass Fiber
Flame Retardant**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Primary Additive	30 %	30 %	
Specific Gravity	1.62	1.62	D 792
Molding Shrinkage			
1/8 in (3.2 mm) section	0.0010 - 0.0025 in/in	0.10 - 0.25 %	D 955
Water Absorption, 24 hrs @ 23°C	0.120 %	0.120 %	D 570

MECHANICAL

Impact Strength, Izod			
notched 1/8 in (3.2 mm) section	2.0 ft-lbs/in	107 J/m	D 256
unnotched 1/8 in (3.2 mm) section	12.0 ft-lbs/in	641 J/m	D 4812
Tensile Strength	17000 psi	117 MPa	D 638
Tensile Elongation	2.0 - 3.0 %	2.0 - 3.0 %	D 638
Tensile Modulus	1.20 x 10 ⁶ psi	8274 MPa	D 638
Flexural Strength	25000 psi	172 MPa	D 790
Flexural Modulus	1.15 x 10 ⁶ psi	7929 MPa	D 790

THERMAL

Deflection Temperature			
@ 264 psi (1820 kPa)	180 °F	82 °C	D 648
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	10000 - 15000 psi	69 - 103 MPa
Melt Temperature	430 - 470 °F	221 - 243 °C
Mold Temperature	125 - 200 °F	52 - 93 °C
Drying	4 - 6 hrs @ 225 °F	4 - 6 hrs @ 107 °C
Moisture Content	0.01 %	0.01 %
Dew Point	-40 °F	-40 °C

PROCESSING NOTES

Desiccant Type Dryer Required.