

Product Data Sheet & General Processing Conditions

> RTP 503 HB Styrene Acrylonitrile (SAN) Glass Fiber UL94 HB

The RTP 500 series offers improved strengths over the base resin. This series has an excellent balance of properties and is one of the most cost effective RTP Company series.

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

			ASTM
PERMANENCE	English	SI Metric	TEST
Primary Additive	20 %	20 %	
Specific Gravity	1.20	1.20	D 792
Molding Shrinkage			
1/8 in (3.2 mm) section	0.0020 - 0.0035 in/in	0.20 - 0.35 %	D 955
MECHANICAL			
Impact Strength, Izod			
notched 1/8 in (3.2 mm) section	0.9 ft-lbs/in	48 J/m	D 256
unnotched 1/8 in (3.2 mm) section	4.5 ft-lbs/in	240 J/m	D 4812
Tensile Strength	15500 psi	107 MPa	D 638
Tensile Elongation	1.0 - 2.0 %	1.0 - 2.0 %	D 638
Tensile Modulus	1.10 x 10^6 psi	7584 MPa	D 638
Flexural Strength	21000 psi	145 MPa	D 790
Flexural Modulus	1.10 x 10^6 psi	7584 MPa	D 790
THERMAL			
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 - 15000 psi	69 - 103 MPa
Melt Temperature	460 - 535 °F	238 - 279 °C
Mold Temperature	125 - 180 °F	52 - 82 °C
Drying	2 hrs @ 180 °F	2 hrs @ 82 °C

## PROCESSING NOTES

Desiccant Type Dryer Required.

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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. No information supplied by RTP Company constitutes a warranty regarding product performance or use. Any information regarding performance or use is only offered as suggestion for investigation for use, based upon RTP Company or other customer experience. RTP Company makes no warranties, expressed or implied, concerning the suitability or fitness of any of its products for any particular purpose. It is the responsibility of the customer to determine that the product is safe, lawful and technically suitable for the intended use. The disclosure of information herein is not a license to operate under, or a recommendation to infringe any patents.

RTP COMPANY • 580 EAST FRONT STREET • WINONA, MN 55987 • 507-454-6900