SHORT GLASS FIBER COMPOUNDS

Reinforced Thermoplastics from RTP Company

Quick Information

- **Improve tensile and flexural performance of base resins**
- **Reduce part warpage and increase temperature performance**
- **Create strong, lightweight parts with cost efficient compounds**

Imagine a thermoplastic molding compound that offers excellent strength and dimensional stability. One that bridges the price-to-performance gap between neat resins and long fiber compounds. At RTP Company, we not only imagined it, we've made it a reality.

Short Fiber Compounds are excellent for material replacement applications where economics are an issue, but extra performance is necessary.

Short Fiber Compounds from RTP Company can be individually formulated to end-use specifications and offer better physical properties than competing materials by use of proprietary compounding techniques and a long history of research and development. Pellet lengths up to up to one-half inch may be chosen for maximum performance, depending on processing requirements – yet run easily in conventional molding equipment .

Standard formulations with 10 - 50% glass loading by weight are available in all commodity and engineering resin systems. The benefits of fiber reinforcement are more dramatic in semi-crystalline polymers, particularly toughness..

Applications which can benefit from using Short Glass Fiber Compounds include power and hand tools, sporting goods, automotive, computer and electronic devices such as brackets and housings, outdoor gardening equipment, and door handles and levers.

Short Glass Fiber Compounds from RTP Company...another innovation from the leader in specialty engineered compounds.

World Headquarters:

RTP Company
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RTP Co.
Imagineering Plastics®

The Leader in Specialty Compounding

Manufacturing Facilities:

ISO 9001 REGISTERED FACILITIES

Winona, MN
Sauk Rapids, MN
South Boston, VA
Fort Worth, TX
Indianapolis, IN
Beaune, France
Singapore
Suzhou, China

9/07

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Comparative Physical Properties of Neat Resin, Short Glass Fiber Reinforced, and Long Glass Fiber Compounds

NYLON 6/6	RTP 200 Base Resin	RTP 207 40% Short Glass	VLF80207 EM HS 40% Long Glass
Specific Gravity	1.14	**1.46**	1.46
Shrinkage, 1/8in,in/in	0.0150	**0.0010 - 0.0040**	0.0010 - 0.0030
Notched, ft-lb/in	1.0	**2.3**	6.0
Unnotched, ft-lb/in	20.0	**21.0**	21.0
Tens. Strength, psi	12,000	**27,000**	33,000
Tens. Elong, %	>10.0	**2.5 - 3.5**	2.0 - 3.0
Tens. Mod, psi x 10^6	0.40	**1.90**	2.00
Flex. Strength, psi	15,500	**43,000**	49,000
Flex. Mod, psi x 10^6	0.40	**1.68**	1.70
HDT @ 264 psi, ˚F	150	**480**	480

POLYPROPYLENE	RTP 100 Base Resin	RTP 107 40% Short Glass	VLF80107 EM HS 40% Long Glass
Specific Gravity	0.91	**1.21**	1.21
Shrinkage, 1/8in,in/in	0.0150 - 0.0200	**0.0010 - 0.0030**	0.0010 - 0.0030
Notched, ft-lb/in	1.0	**1.0**	5.0
Unnotched, ft-lb/in	30.0	**4.0**	16.0
Tens. Strength, psi	4,700	**9,000**	17,000
Tens. Elong, %	>10.0	**1.5 - 2.5**	2.0 - 3.0
Tens. Mod, psi x 10^6	0.25	**1.20**	1.30
Flex. Strength, psi	6,000	**13,500**	26,000
Flex. Mod, psi x 10^6	0.20	**1.00**	1.10
HDT @ 264 psi, ˚F	130	**260**	310

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