

## Talc-Reinforced Polypropylene

**Polifil® T** series compounds are homopolymer polypropylene resins reinforced with asbestos-free talc. They possess high flex modulus, high deflection temperature, good chemical resistance and colorability, low shrinkage and yield maximum stiffness combined with characteristic impact. Polifil® T products are UL94 HB rated. These compounds are used in automotive (underhood) applications, major appliances, electrical goods, housewares and other utility products. Standard processing techniques are applicable.

<b>PHYSICAL</b>	<b>ASTM/ Method</b>	<b>Polifil® T-10</b>	<b>Polifil® T-20</b>	<b>Polifil® T-30</b>	<b>Polifil® T-40</b>
Reinforcement content (%)	TPG WI	10	20	30	40
Specific gravity	D 792	0.98	1.05	1.15	1.24
Melt flow 230/2.16 (g/10 min)	D 1238	8-12*	8-12*	8-12*	8-12*
Water absorption, 24 hours (%)	D 570	nil	nil	nil	nil
Mold shrinkage – 1/8" specimen (in/in)	D 955	0.015	0.010	0.009	0.008

### **MECHANICAL @ 73°F**

Tensile strength (psi)	D 638	4,900	4,900	4,750	4,600
Elongation @ yield (%)	D 638	7.0	6.0	5.0	3.5
Elongation @ break (%)	D 638	22	17	16	15
Tensile modulus (kpsi)	D 638	240	280	330	380
Flexural modulus, tangent (kpsi)	D 790	270	300	350	400
Flexural strength (psi)	D 790	7,000	7,300	7,500	8,000
Izod impact, notched (ft-lbs/in)	D 256	0.60	0.55	0.50	0.50
Gardner impact, 1/2" tup (in-lbs)	D 5420	12	8	5	5
Hardness, shore (D-scale)	D 1415	72	74	75	77

### **THERMAL**

Deflection temperature, 66psi (°F)	D 648	235	255	270	280
Deflection temperature, 264psi (°F)	D 648	135	145	160	175
Flammability** (Rating)	UL94	HB	HB	HB	HB

\*melt flow may be specified

\*\* TPG UL File# E84888. This rating is not intended to reflect hazards of this or any other material under actual fire conditions.

The property values listed above have been obtained using laboratory controlled test methods. They are offered without guarantee since conditions under which the product is used are beyond our control. Mold shrinkage is intended as a guide only, as specific shrinkage is affected by part design, mold design and molding conditions. Therefore, The Plastics Group disclaims any liability for loss or damage incurred in connection with the use of this product.

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