

GLASS FILLED ACRYLONITRILE-BUTADIENE-STYRENE

Polifil® GFABS series compounds combine the most desirable properties of both components allowing for enhanced processability and toughness together with the stiffness of glass. These compounds are used in firearms, automotive applications, and household appliances. Standard processing techniques are applicable. Use this information as a guide to aid you in selecting the proper resin for your application. TPG will custom compound and fine-tune our formulations for your application.

PHYSICAL	ASTM / Method	Units	Polifil® GFABS-10	Polifil® GFABS-20	Polifil® GFABS-30
Reinforcement Content	TPG WI	%	10	20	30
Specific Gravity	D 792	-	1.1	1.22	1.28
Melt Flow (230/3.8)	D 1238	g/10 min	3-10*	3-10*	3-10*
Water Absorption, 24 Hours	D 570	%	0.2	0.2	0.15
Mold Shrinkage – 1/8" Specimen	D 955	in/in	0.003	0.002	0.002

MECHANICAL @ 73°F

Tensile Strength	D 638	psi	9,500	11,000	13,000
Elongation @ Yield	D 638	%	2.0	2.0	2.0
Elongation @ Break	D 638	%	3.0	2.0	2.0
Tensile Modulus	D 638	kpsi	670	900	910
Flexural Modulus (tangent)	D 790	kpsi	600	800	930
Flexural Strength	D 790	psi	14,800	15,500	16,800
Izod Impact (notched)	D 256	ft-lbs/in	1.2	1.2	1.0
Gardner Impact (1/2" tup)	D 5420	in-lbs	6	4	4
Rockwell Hardness	D 795	R-Scale	105	114	118

THERMAL

Deflection Temperature, 66psi	D 648	°F	210	220	225
Deflection Temperature, 264psi	D 648	°F	208	210	212

**melt flow may be specified*

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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