



# POLIFIL® GFABS DATA SHEET

DOING THE NEEDFUL SINCE 1973

## Glass-Reinforced 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	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 (g/10 min)	D 1238	3-10*	3-10*	3-10*
Water absorption, 24 hours (%)	D 570	0.2	0.2	0.15
Mold shrinkage – 1/8" specimen (in/in)	D 955	0.003	0.002	0.002

### MECHANICAL @ 73°F

Tensile strength (psi)	D 638	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 (kpsi)	D 638	670	900	910
Flexural modulus, tangent (kpsi)	D 790	600	800	930
Flexural strength (psi)	D 790	14,800	15,500	16,800
Izod impact, notched (ft-lbs/in)	D 256	1.2	1.2	1.0
Gardner impact, 1/2" tup (in-lbs)	D 5420	6	4	4
Rockwell hardness (R-scale)	D 795	105	114	118

### THERMAL

Deflection temperature, 66psi (°F)	D 648	210	220	225
Deflection temperature, 264psi (°F)	D 648	208	210	212

*\*melt flow may be specified*

The Plastics Group of America

