



POLIFIL® BS DATA SHEET

DOING THE NEEDFUL SINCE 1973

Barium Sulfate Reinforced Polypropylene

Polifil® BS series compounds are homopolymer polypropylene resins reinforced with barium sulfate. They possess increased specific gravity, high flex modulus, high deflection temperature, good chemical resistance, frictional resistance, and x-ray opacity. These compounds are utilized in cosmetic application, molded weights, soundproofing components, and medical devices. 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® BS-2505	Polifil® BS-5010	Polifil® BS-6010	Polifil® BS-7010
Ash content (%)	D-2584	25	50	60	70
Specific gravity	D 792	1.11	1.50	1.72	2.03
Melt flow 230/2.16 (g/10 min)	D 1238	Nominal 5*	Nominal 10*	Nominal 10*	Nominal 10*
Water absorption, 24 hours (%)	D 570	nil	nil	nil	nil
Mold shrinkage (in/in)	.098" wall	0.010	0.008	0.007	0.006

MECHANICAL @ 73°F

Tensile strength (psi)	D 638	4,300	3,500	2,990	2,200
Elongation @ break (%)	D 638	40	30	25	20
Flexural modulus, 1% secant (kpsi)	D 790	210	260	270	280
Flexural modulus, tangent (kpsi)	D 790	240	280	290	300
Flexural strength (psi)	D 790	2,300	2,600	2,700	3,000
Izod impact, notched (ft-lbs/in)	D 256	0.60	0.50	0.45	0.40

THERMAL

Deflection temperature, 66psi (°F)	D 648	225	235	245	255
Deflection temperature, 264psi (°F)	D 648	130	135	140	150

**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.