



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-7010
Ash content (%)	D-2584	23	50	70
Specific gravity	D 792	1.11	1.50	2.01
Melt flow 230/2.16 (g/10 min)	D 1238	7*	10*	10*
Water absorption, 24 hours (%)	D 570	nil	nil	nil
Mold shrinkage (in/in)	.098" wall	0.012	0.013	0.006

MECHANICAL @ 73°F

Tensile strength (psi)	D 638	4,300	3,500	2,200
Elongation @ break (%)	D 638	50	40	30
Flexural modulus, 1% secant (kpsi)	D 790	210	260	140
Flexural modulus, tangent (kpsi)	D 790	240	280	160
Flexural strength (psi)	D 790	5,600	5,500	5,600
Izod impact, notched (ft-lbs/in)	D 256	0.55	0.65	0.90
Izod impact, no notched (ft-lbs/in)	D 256	7.5	7.8	4.5

THERMAL

Deflection temperature, 66psi (°F)	D 648	225	230	190
Deflection temperature, 264psi (°F)	D 648	130	135	120

*melt flow may be specified

The Plastics Group of America

