



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 Plastics Group of America

