POLIFIL® GFPPCC-WS DATA SHEET

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Chemically Coupled Glass-Reinforced Polypropylene Certified to NSF/ANSI Standard 61 (Black, White, or Natural)

Polifil® GFPPCC-WS series compounds are Water Safe Homopolymer polypropylenes reinforced with chemically coupled glass fibers and are certified to NSF/ANSI/CAN 61 Standard, and meet the regulatory requirements of the U.S. and Canada for Drinking Water System Components. These compounds offer superior strength and stiffness, improved elevated temperature performance, better creep resistance, higher impact strength and higher resistance to high temperature water than conventional glass fiber reinforced polypropylenes. Polifil® GFPPCC products are UL94 HB rated. These compounds are used in chemical resistance applications, appliances, electrical components, automotive, irrigation, utility, filter systems, and potable water products. Standard processing techniques are applicable. Use this information as a guide to aid you in selecting the proper resin for your application.

PHYSICAL	ASTM/ Method	Polifil® GFPPCC -1005WS	Polifil® GFPPCC -2005WS	Polifil® GFPPCC -3005WS	Polifil® GFPPCC -4005WS
Ash content (%)	D 2584	10	20	30	40
Specific gravity	D 792	0.98	1.04	1.13	1.22
Melt flow 230/2.16 (g/10 min)	D 1238	5.0	5.0	5.0	5.0
Water absorption, 24 hours (%)	D 570	0.03	0.03	0.03	0.03
Mold shrinkage 0.098″ wall (in/in)					
Flow Direction	D 955	0.006	0.004	0.004	0.003
Crossflow Direction	D 955	0.011	0.010	0.009	0.008
MECHANICAL @ 73°F					
Tensile strength @ yield (psi)	D 638	6,600	9,500	11,600	13,800
Elongation @ break (%)	D 638	6.8	5.5	4.5	4.0
Flexural modulus, tangent (kpsi)	D 790	390	510	790	980
Flexural strength @ yield (psi)	D 790	9,500	13,500	15,400	17,800
Izod, notched @ R.T. (ft-lbs/in)	D 256	1.2	1.5	1.6	1.9
THERMAL					
Deflection temperature, 66psi (°F)	D 648	285	300	310	315
Deflection temperature, 264psi (°F)	D 648	255	270	290	300
Flammability** (Rating)	UL94	HB	HB	HB	HB

*** TPG UL File# E84888. This rating is not intended to reflect hazards of this or any other material under actual fire conditions.*