Polifil® PP GFRMPPCC-30

Polypropylene Impact Copolymer

The Plastics Group

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Technical Data

Product Description

Polifil ® GFRMPPCC series compounds are high impact polypropylenes reinforced with chemically coupled glass fibers. This combination provides higher impact strength while retaining high stiffness. These compounds are used in appliances, electrical components, automotive and utility products. 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.

General

Material Status	• Commercial: Active		
Literature [1]	• Processing - Polifil Glass Reinforced PP (English) • Technical Datasheet (English)		
Search for UL Yellow Card	• The Plastics Group		
Availability	• North America		
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight		
Features	• Chemically Coupled • Good Stiffness	• High Impact Resistance • Impact Copolymer	
Uses	• Appliances	• Automotive Applications	• Electrical Parts
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.13	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	4.0 to 10	g/10 min	ASTM D1238
Molding Shrinkage - Flow (3.18 mm)	0.35	%	ASTM D955
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus (23°C)	3410	MPa	ASTM D638
Tensile Strength (23°C)	68.9	MPa	ASTM D638
Tensile Elongation			ASTM D638
Yield, 23°C	3.0	%	
Break, 23°C	4.0	%	
Flexural Modulus - Tangent (23°C)	3860	MPa	ASTM D790
Flexural Strength (23°C)	83.4	MPa	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (23°C)	160	J/m	ASTM D256
Gardner Impact (23°C, 12.7 mm)	0.904	J	ASTM D3029
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (R-Scale)	92		ASTM D785
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			ASTM D648
0.45 MPa, Unannealed	149	°C	
1.8 MPa, Unannealed	141	°C	

Injection	Nominal Value	Unit
Drying Temperature	82 to 104	°C
Drying Time	1.0 to 2.0	hr
Rear Temperature	210 to 221	°C
Middle Temperature	216 to 227	°C
Front Temperature	227 to 238	°C
Nozzle Temperature	227 to 249	°C
Processing (Melt) Temp	232 to 260	°C
Mold Temperature	49 to 66	°C
Injection Rate	Fast	
Back Pressure	0.172 to 0.517	MPa
Screw Speed	30 to 60	rpm

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Notes

[1] These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

[2] Typical properties: these are not to be construed as specifications.

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Where to Buy

Supplier

The Plastics Group
Woonsocket, RI USA
Telephone: 800-394-4166
Web: http://www.plasticsgroup.com/

Distributor

Atlantic Polymers Corp.
Telephone: 914-273-0125
Web: http://www.apolymers.com/
Availability: North America

M. Holland Canada Company
Telephone: 905-665-1168
Web: http://www.mholland.com/
Availability: Canada

M. Holland Company
Telephone: 855-497-1403
Web: http://www.mholland.com/
Availability: Mexico, United States

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