

## Hippe PF GC 21 Woven Glass Cloth Reinforced Phenolic Resin - Round, Rolled Tube

Category : Polymer , Thermoset , Phenolic , Phenolic, Novolac, Glass Filled

### Material Notes:

Used in mechanical, electrical and electronic applications. Very high mechanical strength at moderate temperatures. Information provided by Hippe.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Hippe-PF-GC-21-Woven-Glass-Cloth-Reinforced-Phenolic-Resin-Round-Rolled-Tube.php](http://www.lookpolymers.com/polymer_Hippe-PF-GC-21-Woven-Glass-Cloth-Reinforced-Phenolic-Resin-Round-Rolled-Tube.php)

Physical Properties	Metric	English	Comments
Specific Gravity	1.50 - 1.80 g/cc	1.50 - 1.80 g/cc	IEC 1212-2 7.2

Mechanical Properties	Metric	English	Comments
Flexural Strength	>= 140 MPa @Diameter >=100 mm	>= 20300 psi @Diameter >=3.94 in	Perpendicular to laminations; IEC 1212-2 4.1
Compressive Strength	>= 120 MPa	>= 17400 psi	Axial; IEC 1212-2 4.2

Electrical Properties	Metric	English	Comments
Insulation Resistance	>= 2.00e+7 ohm @Diameter 8.00 - 10.0 mm	>= 2.00e+7 ohm @Diameter 0.315 - 0.394 in	After immersion in water; IEC 1212-2 5.2
Dielectric Constant	<= 6.0 @Frequency 1.00e+6 Hz	<= 6.0 @Frequency 1.00e+6 Hz	IEC 1212-2 5.3
Dielectric Breakdown	>= 15000 V @Temperature 90.0 °C, Time 20.0 sec	>= 15000 V @Temperature 194 °F, Time 0.00556 hour	Step-by-step test, In oil, parallel to laminations; IEC 1212-2 5.1
	>= 15000 V @Temperature 90.0 °C, Time 60.0 sec	>= 15000 V @Temperature 194 °F, Time 0.0167 hour	Proof test, In oil, parallel to laminations; IEC 1212-2 5.1
Dissipation Factor	<= 0.040 @Frequency 1.00e+6 Hz	<= 0.040 @Frequency 1.00e+6 Hz	IEC 1212-2 5.3

Descriptive Properties	Value	Comments
Cohesion between layers	> 200 MPa	IEC 1212-2 4.3, Internal diameter <100 mm

Thermal Endurance Descriptive Properties	130 T.1 Value	IEC 1212-2 7.1 Comments
Water Absorption	< 3 mg/cm <sup>2</sup>	IEC 1212-2 7.1

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China