

SHEERGARD® Q65C

Q65C is a SHEERGARD® microwave transmissive composite designed specifically for use in RF applications. The Q Series is made of high strength aramid fibers (Kevlar®) and a polytetrafluoroethylene (PTFE) matrix.

Its quadri-axial, multi-ply, laminated construction provides superior shear stability even in the most extreme environments. The composite offers durable hydrophobicity enhanced flexural characteristics, very high tear strength, an excellent temperature range (-60°F to +500°F) and fire performance.

Typical Properties

Property	Value	Test Method
Coated Fabric Weight (oz/yd ²)	97.0 nominal	ASTM D751
Thickness (in)	0.090 nominal	ASTM D751
Tensile Strength (lbs/in)		
Warp	1800 min. avg.	ASTM D4851
Fill, D1, D2	1700 min. avg.	
Tensile Strength, 50lb crease fold (lbs/in)		
Warp	1600 min. avg.	ASTM D4851
Fill, D1, D2	1500 min. avg.	
Trap Tear Strength (lbs)		
Warp, Fill	400 min. avg.	ASTM D4851
Coating Adhesion (lbs/in)	13.0 min. avg.	ASTM D4851
Uniaxial Elongation at 200lbs/in (%)		
Warp	1.7 nominal	ASTM D4851
Fill	28 nominal	
Dielectric Constant	2.47 nominal	ASTM D2520
Loss Tangent	0.007 nominal	ASTM D2520
Incombustibility (seconds)	0 to flameout	NFPA 701
Hydrophobic Contact Angle (degrees)	100+ nominal	ASTM C813

Nominal values available upon request. Values listed are for virgin roll goods only. Appropriate industry safety factors need to be used to account for the in-service effects of handling, weathering, etc.

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Limited Warranty: For a period of 6 months from the date of first sale, Saint-Gobain Performance Plastics Corporation warrants this product(s) to be free from defects in manufacturing. Our only obligation will be to provide replacement product for any portion proving defective, or at our option, to refund the purchase price thereof. User assumes all other risks, if any, including the risk of injury, loss or damage, whether direct or consequential, arising out of the use, misuse, or inability to use this product(s). SAINT-GOBAIN PERFORMANCE PLASTICS DISCLAIMS ANY AND ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

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