

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 (g/m ²)	2893 nominal	ASTM D751
Thickness (mm)	2.159 nominal	ASTM D751
Tensile Strength (N/cm) Warp, Fill D1, D2	3150 min. avg. 2980 min. avg.	ASTM D4851
Tensile Strength, 200N crease fold (N/cm) Warp, Fill D1, D2	2800 min. avg. 2450 min. avg.	ASTM D4851
Trap Tear Strength (N) Warp, Fill	1780 min. avg.	ASTM D4851
Coating Adhesion (N/cm)	31.5 min. avg.	ASTM D4851
Uniaxial Elongation at 350N/cm (%) Warp Fill	1.7 nominal 2.8 nominal	ASTM D4851
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.

Saint-Gobain Performance Plastics
701 Daniel Webster Highway Merrimack, NH 03054
Customer Service: +1 800 451 6101 Tel: +1 603 424 9000
fabricatedsystems@saint-gobain.com
www.sheergard.com

Kevlar® is a registered trademark of DuPont™
SHEERGARD® is a Saint-Gobain Brand
©2018 Saint-Gobain Performance Plastics Corporation

NOTE: Saint-Gobain Performance Plastics Corporation does not assume any responsibility or liability for any advice furnished by it, or for the performance or results of any installation or use of the product(s) or of any final product into which the product(s) may be incorporated by the purchaser and/or user. The purchaser and/or user should perform its own tests to determine the suitability and fitness of the product(s) for the particular purpose desired in any given situation.

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.

Valid 05/2018 • Supersedes all previous versions
PDS.SGQ65C(SI).0518.AFF