

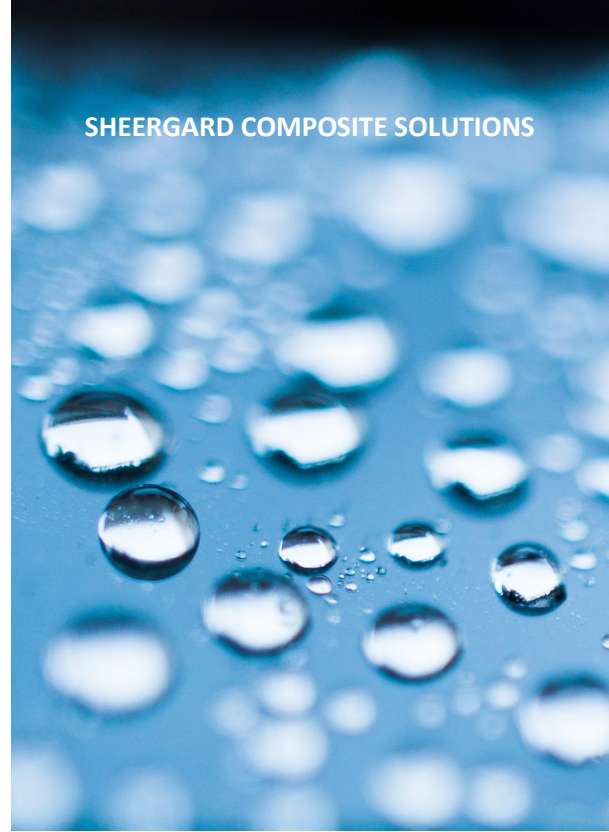
# SHEERGARD® K60C

SHEERGARD COMPOSITE SOLUTIONS

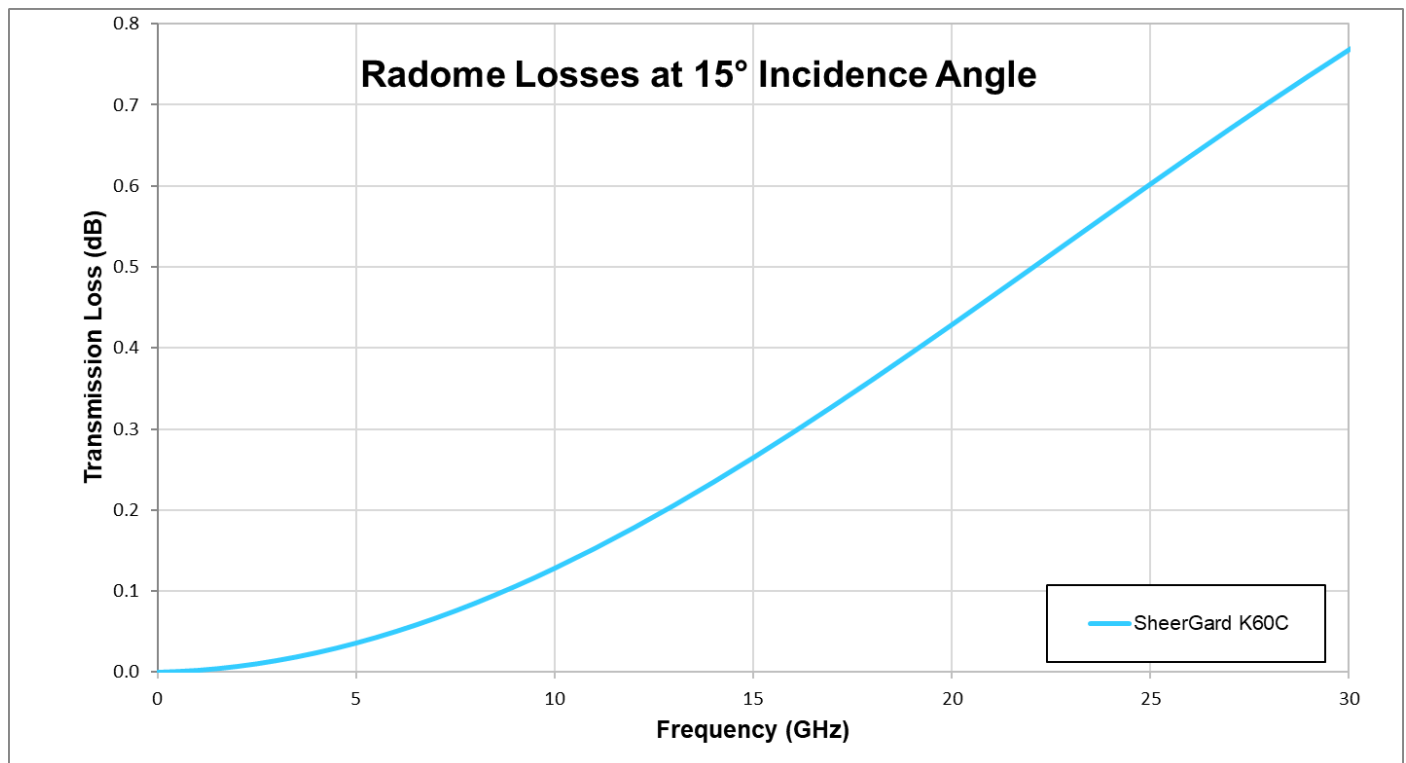
## RF TRANSMISSIVE COMPOSITES

**SHEERGARD® K60C** is a microwave transmissive composite designed specifically for use in broadband RF applications, including high frequency Ku and Ka antennas. The composite is constructed from high strength aramid fibers (Kevlar®) in a polytetrafluoroethylene (PTFE) matrix coating.

The K60C fabric incorporates aramid fibers in a basket weave for enhanced flexural characteristics and high tear strength used specifically for spherical radomes. The PTFE coating provides a permanent hydrophobic surface (field proven for over 30 years) for RF performance during rain or condensation conditions.



## TRANSMISSION LOSS AT INCIDENCE ANGLES



# SHEERGARD® K60C

## SPECIFICATIONS

Property	Imperial	SI	Test Method
Width (nominal)	80 in	2.03 m	-
Coated Fabric Weight (nominal)	39 oz/yd <sup>2</sup>	1.32 kg/m <sup>2</sup>	ASTM D751
Thickness (nominal)	0.037 in	0.94 mm	ASTM D751
Tensile Strength (lbs/in) Warp (min. avg.) Fill (min. avg.)	1600 lb/in 1600 lb/in	280 kN/m 280 kN/m	ASTM D4851
Tear Strength (lbs) Warp (min. avg.) Fill (min. avg.)	185 lb 185 lb	823 N 823 N	ASTM D4851
Coating Adhesion (min. avg.)	13.0 lb	2.3 kN/m	ASTM D4851
Maximum Water Absorption	2.0%		24 hr Total Immersion
Dielectric Constant (nominal)	2.65		ASTM D2520
Loss Tangent (nominal)	0.005		ASTM D2520
Incombustibility (seconds)	0 to flameout		NFPA 701
Hydrophobic Contact Angle (°)	119° nominal		ASTM C813
Temperature Range (°F)	-100 to +300 °F	-73 to 149 °C	-

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.

## CONTACT

### Worldwide

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**IMPORTANT:** The values presented are min/max specification values. Nominal values can be provided upon request. Contact your representative for more information. It is the user's responsibility to ensure the suitability and safety of SHEERGARD Composite Solutions products for all intended uses and that the materials to be used comply with all applicable regulatory requirements. SHEERGARD assumes no responsibility for any product failures that occur due to misuse of the materials it provides arising out of the design, fabrication, or application of the products into which the materials are incorporated by purchaser and/or user. SHEERGARD® RF transmissive fabrics are not sold as roll goods.

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