

SHEERGARD[®] M26

SHEERGARD COMPOSITE SOLUTIONS

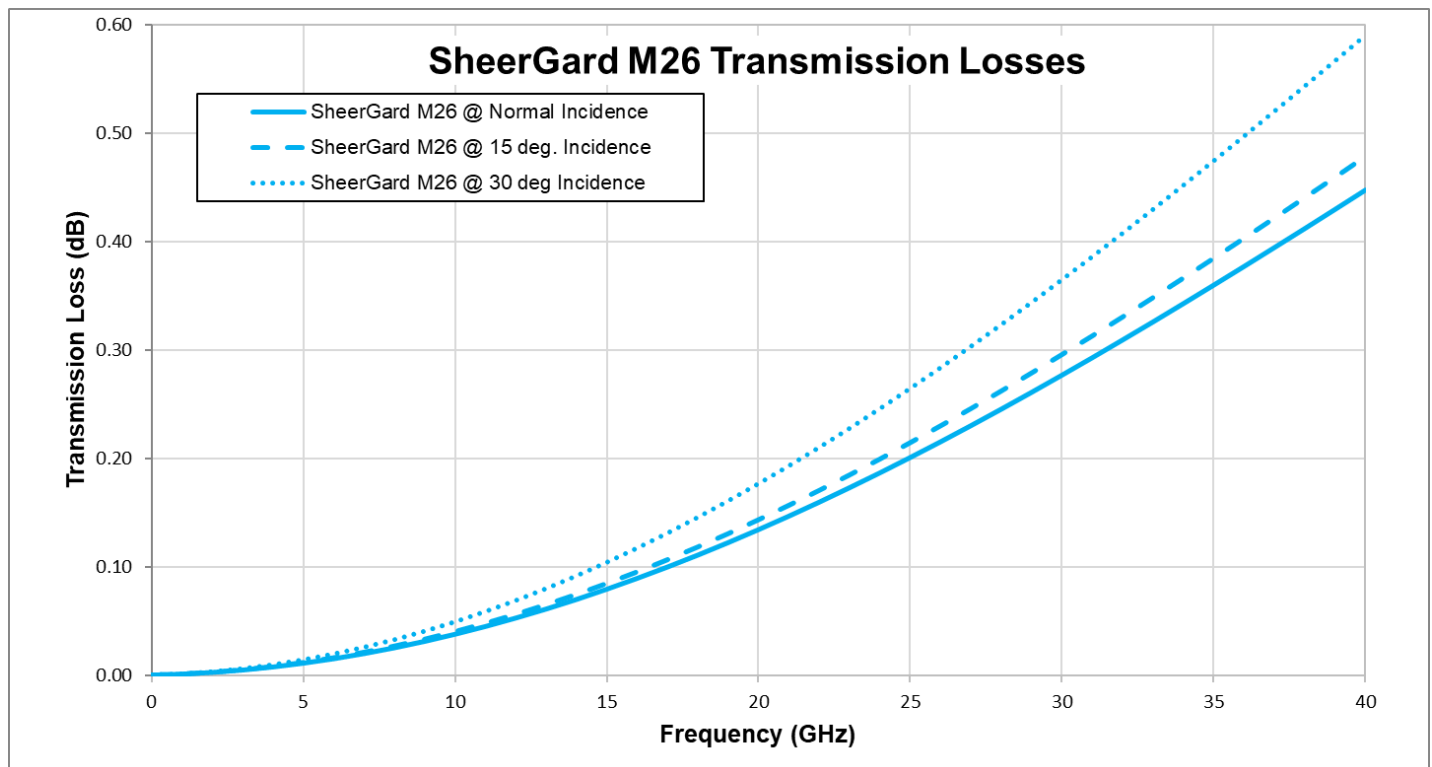
RF TRANSMISSIVE COMPOSITES

SHEERGARD M26 is a microwave transmissive composite designed specifically for use in broadband RF applications, including high frequency 5G mm wave antennas. The composite is constructed from high strength fiberglass fibers in a polytetrafluoroethylene (PTFE) matrix coating.

The “M” group incorporates fiberglass fibers in a flat, plain weave in the structural substrate. 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® M26

TYPICAL PROPERTIES

Property	Imperial	SI	Test Method
Width (nominal)	125 inches	3.17 m	-
Coated Fabric Weight (nominal)	22.5 oz/yd ²	0.77 kg/m ²	ASTM D751
Thickness (nominal)	0.016 in	0.43 mm	ASTM D751
Tensile Strength (lbs/in) Warp (min. avg.) Fill (min. avg.)	375 lb/in 375 lb/in	66 kN/m 66 kN/m	ASTM D4851
Tensile Strength, after Flex Fold (lbs/in) Warp (min. avg.) Fill (min. avg.)	350 lb/in 350 lb/in	61 kN/m 61 kN/m	ASTM D4851
Trap Tear Strength (lbs) Warp (min. avg.) Fill (min. avg.)	25 lb 33 lb	111 N 147 N	ASTM D4851
Uniaxial Elongation 40lbs/in (70N/cm) Warp (avg.) Fill (avg.)	2.0% 5.0 %	2.0% 5.0 %	ASTM D4851
Coating Adhesion (min. avg.)	7.0 lb	1.2 kN/m	ASTM D4851
Maximum Water Absorption	0.5%		24 hr Total Immersion
Dielectric Constant (nominal)	2.80		ASTM D2520
Loss Tangent (nominal)	0.005		ASTM D2520
Incombustibility (seconds)	0 to flameout		NFPA 701
Hydrophobic Contact Angle (°)	> 90° or Greater		ASTM C813
Temperature Range (°F)	-60° to +300°	-50° to 149 °C	-

The values presented are min/max specification values. Nominal values can be provided 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

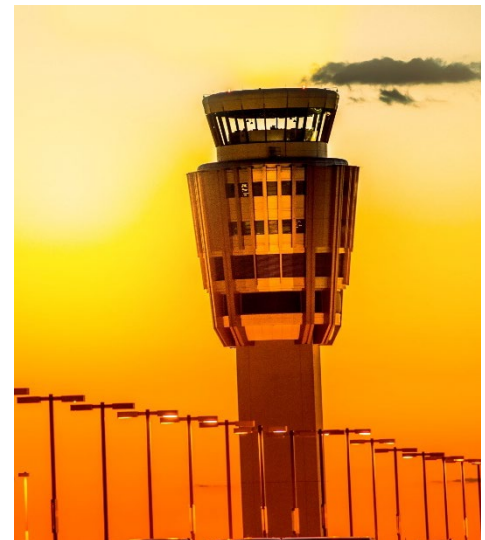
SHEERGARD Composite Solutions

6 Industrial Way

Salem, NH 03079 USA

Tel: +1 (603) 912 8302

www.sheergard.com



IMPORTANT: 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.

SHEERGARD COMPOSITE SOLUTIONS DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.