



Tedlar®

polyvinyl fluoride film

Electrical Properties

Tedlar® PVF film is characterized by high dielectric constant and high dielectric strength as shown in **Figures 1, 2, 3, and 4**. The excellent thermal aging properties and chemical resistance of *Tedlar*® offer many functional contributions in a wide variety of applications.

In addition, *Tedlar*® films with different electrical resistivities are available. The electrical properties for standard *Tedlar*® films are shown in **Table 1**.

Table 1
Electrical Properties

Property	TST20BG4	TWH20BS3	Test Method
Volume Resistivity			D257-78
ohm-cm at 23°C (73°F)	1.8 x 10 ¹⁴	6.9 x 10 ¹³	
ohm-cm at 100°C (212°F)	7.4 x 10 ¹⁰	1.9 x 10 ¹¹	
Surface Resistivity			D257-78
ohm/sq at 23°C (73°F)	6.1 x 10 ¹⁵	1.6 x 10 ¹⁵	
ohm/sq at 100°C (212°F)	7.2 x 10 ¹¹	1.6 x 10 ¹²	
Short-Term Dielectric Strength			D149-81
DC—V/mil	3,700	3,200	
AC—RMS V/mil	2,100	1,800	

Note: All samples conditioned per ASTM D618-61 and E104-85.

Figure 1. Dielectric Constant—*Tedlar*® TST20BG4 vs. Frequency at Various Temperatures

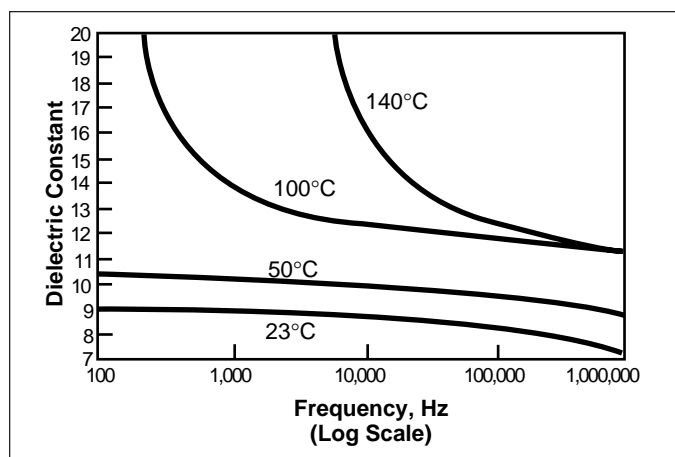


Figure 2. Dissipation Factor—*Tedlar*® TST20BG4 vs. Frequency at Various Temperatures

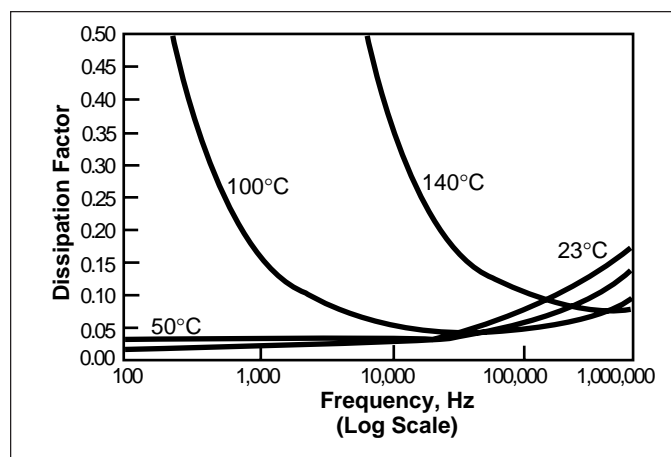


Figure 3. Dielectric Constant—*Tedlar*® TWH20BS3 vs. Frequency at Various Temperatures

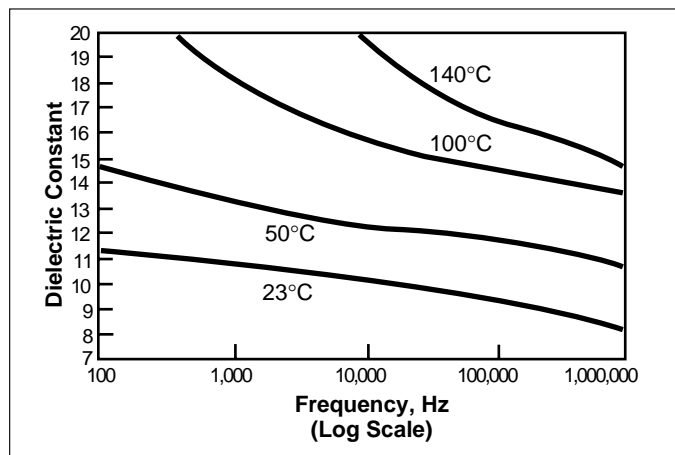
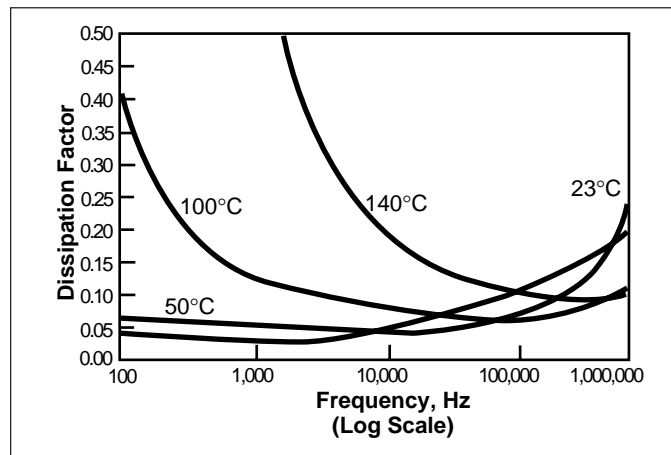


Figure 4. Dissipation Factor—*Tedlar*® TWH20BS3 vs. Frequency at Various Temperatures



Note: Samples prepared and tested per ASTM D150, D618-61, and E104-85.

For more information on *Tedlar*® PVF films:

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Note: We believe this information is the best currently available on the subject. It is offered as a possible helpful suggestion in experimentation you may care to undertake along these lines. It is subject to revision as additional knowledge and experience are gained. DuPont makes no guarantee of results and assumes no obligation or liability whatsoever in connection with this information. This publication is not license to operate under, or intended to suggest infringement, of any existing patents.

CAUTION: Do not use in medical applications involving permanent implantation in the human body. For other medical applications, see "DuPont Medical Caution Statement," H-50102.



Tedlar®
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