



Product Data

Cablelite® 950-706

Product Description

Cablelite® 950-706 matrix material is a proven product in producing optical fiber ribbons. The versatility of this material for various ribbon designs is unsurpassed. Cablelite® 950-706 is the industry standard for optical fiber ribboning.

Product Benefits

- Extremely fast cure
- Very low water sensitivity
- Excellent low-temperature performance
- Patent protected

Performance Characteristics

Liquid Coating	Typical Properties
Viscosity, 25°C, mPa·s	4850
Density, 23°C, kg·m ⁻³	1120

Cured Coating* (Tested at <1% R.H.)	Typical Properties
Glass Transition Range (DMA**), °C at E' _{1000 MPa}	35
Glass Transition Range (DMA**), °C at E' _{100 MPa}	59

Performance Characteristics (cont'd)

Cured Coating* (Tested at 23°C, 50% R.H.)	Typical Properties
Secant modulus***, 2.5% strain, MPa -- on polyester	906
Elongation***, % -- on polyester	25
Tensile strength***, MPa -- on polyester	35
Degree of Cure (UV dose at 95% of Ultimate Secant Modulus, J·cm ⁻²)	0.3
Water Absorption after 24 hrs., 250 µm films, %	2.0
Hydrogen generation (24 hrs, 80°C in air, 75 µm films, µl·g ⁻¹)	0.2

*75 µm films cured in nitrogen at 1.0 J·cm⁻² using one D lamp, unless stated otherwise. UV dose determined with an IL-390 radiometer manufactured by International Light, Inc.

**Dynamic Mechanical Analysis (see DMA graph)

***TEM properties on polyester were obtained after 1 to 2 hours conditioning at 22 +/- 2°C and 50% +/- 5 RH.



Test Methods

Detailed test methods may be obtained through your Covestro sales representative.

Filtration

Cablelite® Inks and Matrix Materials are manufactured using fine filtration techniques designed to minimize particulate matter and to ensure high strength and uniform product performance.

Storage Conditions

Cablelite® matrix materials should be stored in their original containers at temperatures between 15° and 30°C. The bottles that are used for these are UV opaque and allow for air to diffuse through the plastic which prevents premature gelation.

Shelf Life

Cablelite® matrix materials have a shelf life of 18 months from the date of manufacture, provided recommended storage conditions are properly maintained.

Safety Information

This product is formulated with multifunctional acrylates which may cause skin and eye irritation and/or skin sensitization. Safety data sheets for each product are available from your Covestro sales representative. All safety and handling recommendations should be followed carefully.

Conversions

$$N = g \cdot f \times 9.807 \times 10^{-3} \quad \text{kg} \cdot \text{mm}^{-2} = \text{MPa} \times 0.102$$
$$\text{psi} = \text{MPa} \times 145 \quad \text{mPa} \cdot \text{s} = \text{cps}$$

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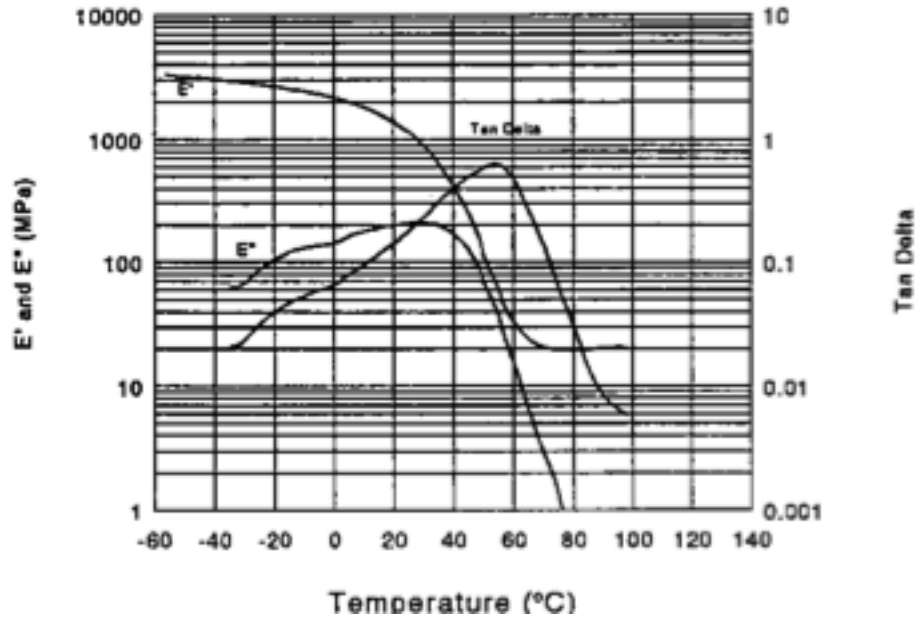
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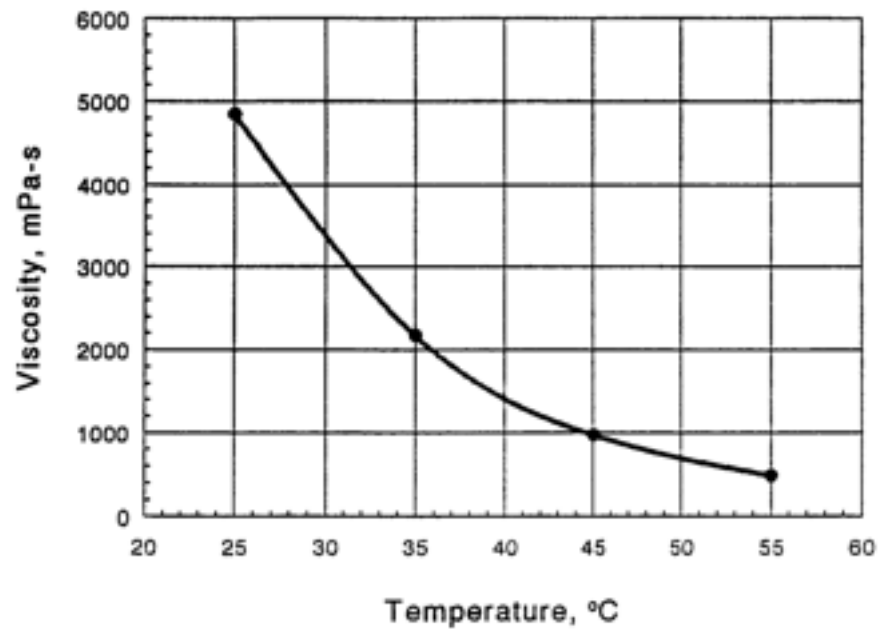
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Dynamic Mechanical Analysis (DMA)

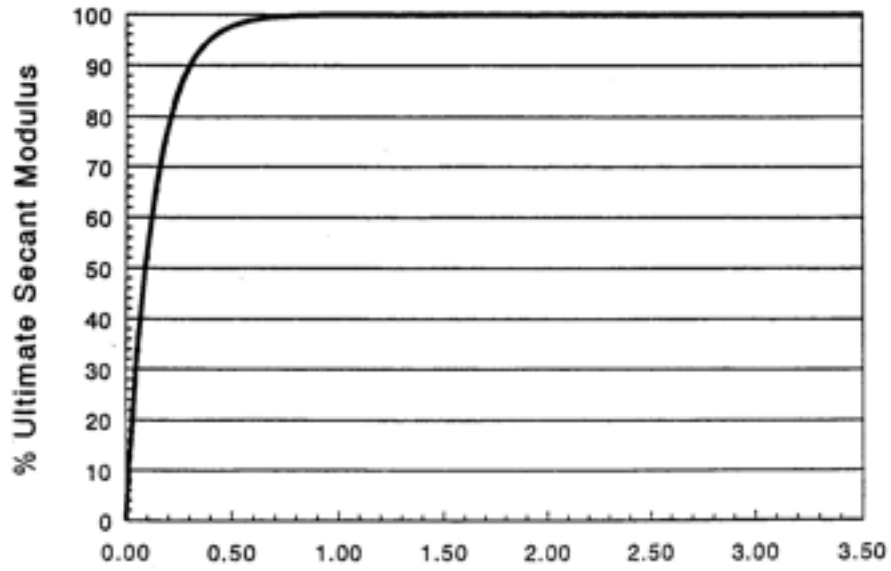


Viscosity vs. Temperature





Cure Speed



Accelerated Aging

