



Product Data

**DeSolite® DF-0016**

**Product Description**

DeSolite® DF-0016 is an optical fiber coating with low refractive index and very low haze.

Due to its relatively low modulus, this coating is usually protected by topcoating it with DeSolite® DS-2015 or any other secondary optical fiber coating.

**Product Benefits**

- Patent-protected
- High clarity (very low haze)
- Processing ease:
  - solvent free
  - fast line speed

**Performance Characteristics**

Liquid Coating	Typical Properties
Viscosity, 25 °C, mPa•s	4,200
Density, 23 °C, kg•m <sup>-3</sup>	1,005
Liquid Refractive Index, 23 °C	1.363

Cured Coating* (Tested at 23 °C, 50% R.H.)	Typical Properties
Segment modulus, 2.5% strain, MPa	10
Elongation, %	45
Tensile strength, MPa	3
Refractive Index	1.370
Hardness, Shore A	80

\*75 µm films cured in nitrogen at 1.0 J•cm<sup>-2</sup> 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)



## Test Methods

Test methods available upon request.

## Filtration

DeSolite® Optical Fiber Coatings are manufactured using fine filtration techniques designed to minimize particulate matter and to ensure high strength and uniform product performance.

## Storage Conditions

DeSolite® 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

DeSolite® DF-0016 has a shelf life of 2 years from the date of manufacture, provided recommended storage conditions are properly maintained.

## Safety Information

Safety data sheets for each product are available from your Covestro sales representative. All safety and handling recommendations should be followed carefully.

## Conversions

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

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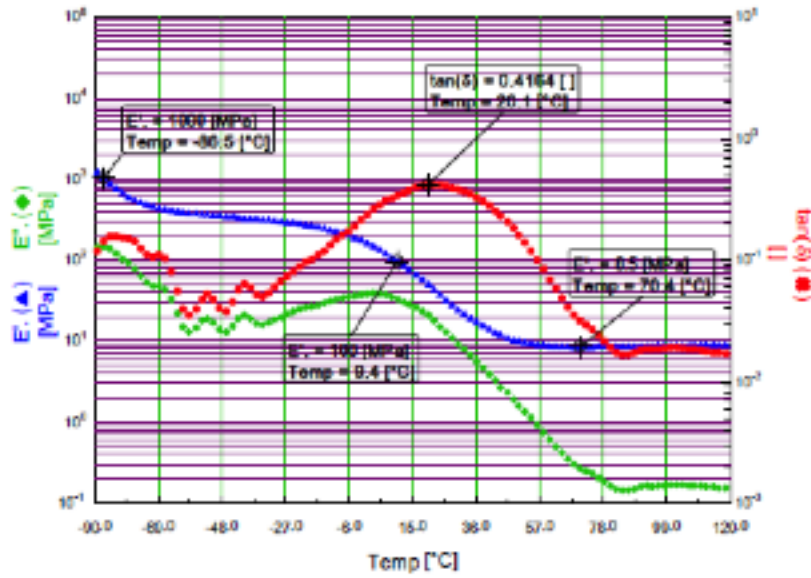
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Dynamic Mechanical Analysis (DMA)  
DF-0016



Temperature/Viscosity Curve  
DF-0016

