DeSolite®
Optical Fiber Coatings

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^{-3}	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-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)

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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

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

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