

Manufacturer: Covestro

**Product Name:** Covestro DeSolite® DS-2042 Secondary Optical Fiber Coating, UV Cure (10 kg)

**Manufacturer Part Number:** COV-DS-2042-10KG

Click here for more details on the Covestro DeSolite® DS-2042 Secondary Optical Fiber Coating, UV Cure (10 kg)



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# Product Data Next Generation Secondary **Coatings** Secondary Coating DeSolite® DS-2042

#### Product Description

Next Generation DeSolite® Supercoatings are developed for both Wet-on-Wet and Wet-on-Dry processes that provide superior microbending performance and robust field application.

#### **Physical Characteristics**

Liquid Coating	Typical Properties
Viscosity, at 25°C, mPa•s at 35°C, mPa•s	6,002 2,104
Density, 23°C, kg•m <sup>-3</sup>	1,130
Liquid Refractive Index, 23°C	1.514
Surface tension, 23°C, dynes•cm <sup>-1</sup>	22.8

Cured Coating* (Tested at <1% R.H.)	Typical Properties
Glass Transition Range (DMA***), °C at E' <sub>1000 MPa</sub>	10.6
Glass Transition Range (DMA***), °C at E' <sub>100 MPa</sub>	86.1

Cured Coating* (Tested at 23°C, 50% R.H.)	Typical Properties
Segment modulus, 2.5% strain, MPa	1,078
Elongation, %	9
Tensile strength, MPa	38

#### Product Benefits

- · Enables high draw speeds
- Exceptional microbending performance
- High n<sub>d</sub> for 2 pt. bending and tensile
- methods • Excellent cavitation resistance
- · Optimized adhesion for ribbon, loose-tube and aging performance

Cured Coating* (continued) (Tested at 23°C, 50% R.H.)	Typical Properties
Degree of Cure (UV dose at 95% of Ultimate Secant Modulus, J•cm <sup>-2</sup> )	0.28
Dynamic water sensitivity (150 µm films) peak absorption, % extractables, %	3.1 0.3
Refractive Index	1.534
Hydrogen generation (24 hrs, 80°C in air, 75 µm films, µl•g¹)	0.15

\*Real Time Dynamic Mechanical Analysis

 $^{**}75\,\mu m$  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

## Contact the professionals at Fiber Optic Center for a quote or to get more details.

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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**

Protect DeSolite® coatings from all sources of ultraviolet light, including sunlight and fluorescent light, to prevent premature curing. It is recommended that DeSolite® coatings be stored in a dry place in unopened, undamaged, original containers at temperatures between 15°C and 30°C. Storage or shipment in cold conditions may result in a phase separation which is reversible and is corrected by heating for 24 hours at 50°C. If possible, the container should be gently rolled to assure uniform dissolution during this heating process.

#### Shelf Life

Recommended shelf life is 18 months from the date of manufacture, provided that the above stated 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•f x 9.807 x 10 -3 kg•mm<sup>-2</sup> = MPa x 0.102 psi = MPa x 145 mPa•s = cps

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Udpdated 22-March-2022

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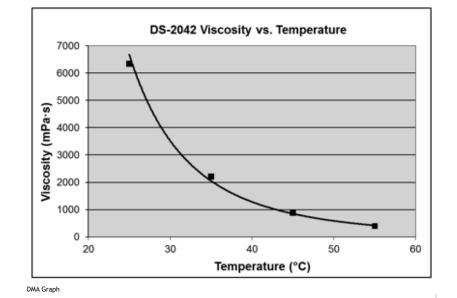
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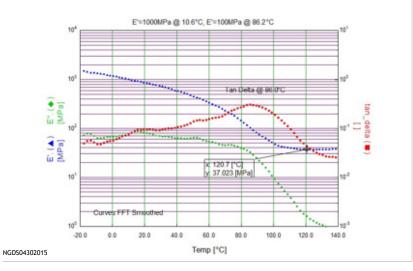
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