Product Data

Next Generation Primary Coating

DeSolite® DP-1032

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.

Product Benefits

- Enables high draw speeds
- Exceptional microbend performance
- High n_d for 2 pt. bending and tensile methods
- Excellent cavitation resistance
- Optimized adhesion for ribbon, loose-tube and aging performance

Characteristics

Liquid Coating	Typical Properties
Viscosity, 25°C, mPa•s	4,465
Density, 23°C, g/cm^3	1.055
Liquid Refractive Index, 20°C	1.488
Surface tension, 23°C, dynes•cm^{-1}	34

Mechanical Property (RTDMA*)	Typical Properties
Gel Time, sec	0.39
Plateau Modulus, MPa	0.35

Cured Coating* (Tested at <1% R.H.)	Typical Properties
Glass Transition Range (DMA***), °C at E'$_{1000\ MPa}$	-42
Glass Transition Range (DMA***), °C at E'$_{100\ MPa}$	-32

Cured Coating* (Tested at 23°C, 50% R.H.)	Typical Properties
Elongation, %	108
Tensile strength, MPa	0.6
Segment modulus, MPa	1.0

Cured Coating* (continued) (Tested at 23°C, 50% R.H.)	Typical Properties
Hydrogen generation (24 hrs, 80°C in air, 75 µm films, µl•g-1)	0.0
Refractive Index	1.496
Adhesion to glass, 50% RH conditioning, g/in	43
Adhesion to glass, 95% RH conditioning, g/in	35

*Real Time Dynamic Mechanical Analysis

**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

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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 12 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

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

$psi = MPa \times 145$ $mPa \cdot s = cps$

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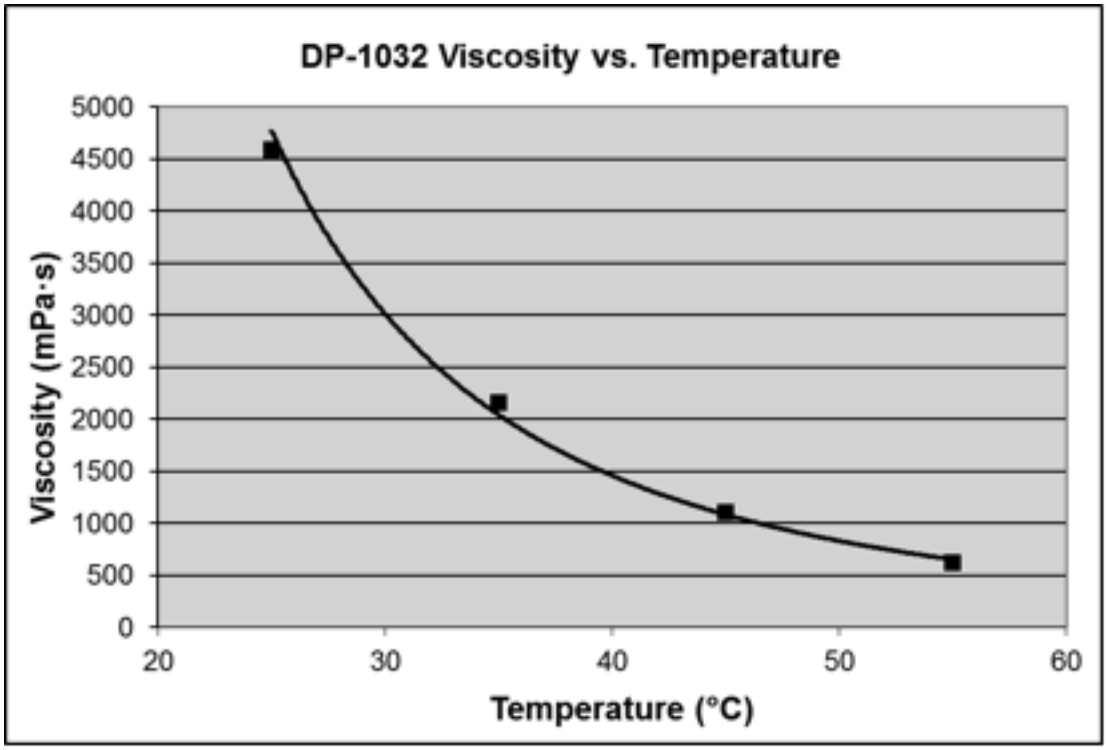

DMA Graph