

Product Data

Bufferlite™ DU-2002

Product Description

Bufferlite™ DU-2002 is a low modulus, matrix material used for tight buffering fiber up to 400-900 microns. DU-2002 was specially formulated to provide very easy strip and excellent stability.

Product Benefits

- Low modulus
- Optically clear
- Excellent strippability
- Fast cure
- Patent-protected

Performance Characteristics

Liquid Coating	Typical Properties
Viscosity, 25°C, mPa·s	3000
Density, 23°C, kg·m ⁻³	1180

Cured Coating* (Tested at <1% R.H.)	Typical Properties
Glass Transition Range (DMA**), °C at E' 1000 MPa	-11
Glass Transition Range (DMA**), °C at E' 100 MPa	25

Cured Coating* (Tested at 23°C, 50% R.H.)	Typical Properties
Secant modulus, 2.5% strain***, MPa	60
Elongation***, %	30
Tensile strength***, MPa	8
Water Absorption after 24 hrs., 250 µm films (%)	1.2
Equilibrium Modulus Change at 85°C/dry for 28 days (%)	11
Equilibrium Modulus Change at 85°C/85RH for 28 days (%)	7

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

Updated: 3/07

Test Methods

Detailed test methods may be obtained through your DSM Desotech sales representative.

Filtration

Bufferlite™ materials are manufactured using fine filtration techniques designed to minimize particulate matter and to ensure high strength and uniform product performance.

Storage Conditions

Bufferlite™ tight buffer 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

Bufferlite™ tight buffer 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. DSM Desotech makes available a booklet titled, "Safe Handling of UV-Curable Materials" which describes the proper use of its UV-curable products. This booklet may also be found online at www.dsmdesotech.com. Material safety data sheets for each product are also available from your DSM Desotech sales representative. All safety and handling recommendations should be followed carefully.

Conversions

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

Contact Us:

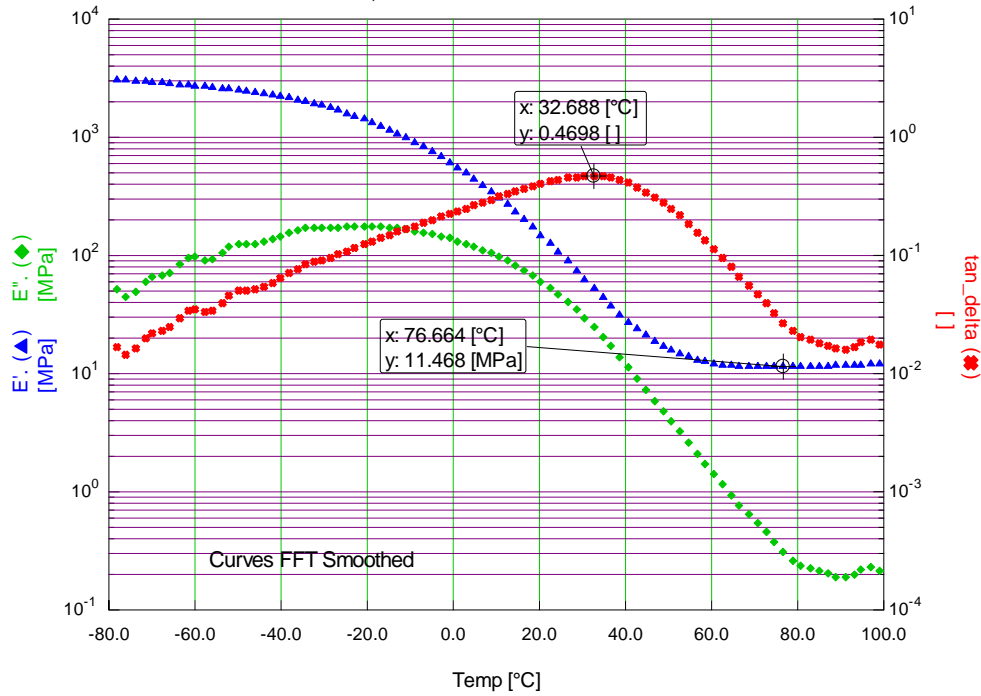
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Dynamic Mechanical Analysis (DMA)

E'=1000MPa @ -11.1°C, E'=100MPa @ 25.2°C. Thickness= 0.062mm.



Viscosity vs. Temperature

