

**Product Data** 

# Cablelite® 3287-9-85

## **Product Description**

Cablelite® 3287-9-85 is a medium modulus matrix material that can be used in many different ribbon structures. One of its unique properties is its use as an overcoat matrix for bonding subunit ribbon assemblies. This product is recommended for splittable ribbon configurations.

### **Product Benefits**

- · Medium modulus
- · Low viscosity
- Patent-protected

#### **Performance Characteristics**

Liquid Coating	Typical Properties
Viscosity, 25°C, mPa·s	5000
Density, 23°C, kg·m <sup>-3</sup>	1070

Cured Coating* (Tested at <1% R.H.)	Typical Properties
Glass Transition Range (DMA**), °C at E' 1000 MPa	4
Glass Transition Range (DMA**), °C at E' 100 MPa	66

<sup>\*</sup>Dynamic Mechanical Analysis (see DMA graph)

## Performance Characteristics (cont'd)

Cured Coating*	Typical
(Tested at 23°C, 50% R.H.)	Properties
Secant modulus***, 2.5% strain, MPa	281
Elongation***, %	15
Tensile strength***, MPa	17
Degree of Cure (UV dose at 95% of	
Ultimate Secant Modulus, J.cm <sup>-2</sup>	0.8
)	0.0
Water Absorption after 24 hrs.,	
250 μm films, %	0.9
Hydrogen generation (24 hrs, 80°C	
in air, 75 μm films, μl·g <sup>-1</sup> )	0.2

\*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)

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

Updated: 9/11



# Cablelite<sup>®</sup> 3287-9-85



#### **Test Methods**

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

#### **Filtration**

Cablelite® Inks and Matrix Materials are manufactured using fine filtration techniques designed to minimize particulate matter and to ensure high strength and uniform product performance.

## **Storage Conditions**

Cablelite® matrix 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

Cablelite® matrix 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 <a href="www.dsmdesotech.com">www.dsmdesotech.com</a>. 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

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

### Contact Us:

DSM Desotech Inc. 1122 St. Charles Street Elgin, Illinois 60120

USA

Tel: +1-847-697-0400 Fax: +1-847-468-7785 DSM Desotech bv P.O. Box 68 3150 AB Hoek van Holland The Netherlands

Tel: +31-1743-15391 Fax: +31-1743-15530 DSM Desotech

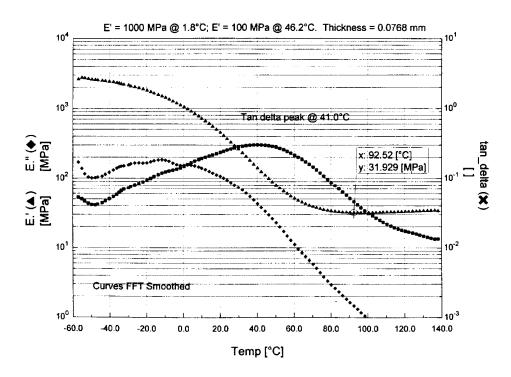
11F, The Headquarters Building No. 168 Middle Xi Zang Rd. Shanghai 200001 CHINA Tel: +86-21-61418188

Fax: +86-21-61417008

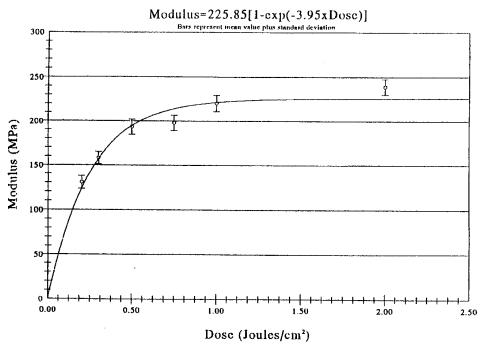
NOTICE: Cablelite is a registered trademark of Royal DSM N.V. The information presented herein is based on generally accepted analytical and testing practices and is believed to be accurate. However, DSM Desotech expressly disclaims any product warranties which may be implied, including warranties of merchantability and/or fitness for a particular purpose. DSM Desotech's products are sold subject to DSM Desotech's standard terms and conditions of sale, copies of which are available upon request. Purchasers are responsible for determining the suitability of the product for its intended use and the appropriate manner of utilizing the product in purchaser's production processes and applications so as to insure safety, quality and effectiveness. Purchasers are further responsible for obtaining necessary patent rights to practice any invention in connection with the use of purchased product and any other product or process. DSM Desotech reserves the right to change specifications of their products without notice.



# Dynamic Mechanical Analysis (DMA)



# **Dose Sensitivity**





Viscosity vs. Temperature

