

### ULTRA LIGHT-WELD<sup>®</sup> 3069 SERIES FLEXIBLE LAMINATING

POLYCARBONATE • PVC • POLYESTER

#### INTRODUCTION

Dymax Ultra Light-Weld structural adhesives can be cured with UV or visible light. Ultra Light-Weld adhesives faster, deeper cures, increase productivity, lower assembly costs and enhance worker safety. When cured with Dymax Light-Welder<sup>®</sup> UV lamps, these adhesives provide optimum process flexibility. They allow the user to select the optimum combination of adhesive and cure mechanism to meet individual process and performance requirements.

#### DESCRIPTION

Ultra Light-Weld 3069 Series are solvent free, 100% solids, adhesives. Lasting bonds form in seconds to both flexible and rigid substrates including PVC, polycarbonate, polyurethane, PET and PETG. Bond strength on polycarbonate and PVC usually exceed the strength of those substrates. The "F" and "RF" versions denote blue fluorescing and red fluorescing respectively. Fluorescing versions do not cure as fast or as deep as non fluorescing versions.

#### TYPICAL UNCURED PROPERTIES

Solvent Content	None - 100% solids	
Composition	Urethane Oligomer/(Meth) Acrylate Monomer Blends	
Appearance	Clear/Light Amber Liquid	
Flash Point	>93°C (200°F)	
Solubility	Alcohols/Chlorinated Solvents/Ketones	
Toxicity	Low	
Refractive Index	1.478 (20°C)	
Density	1.05 g/mL	
Viscosity (20 rpm)	3069	450 cP
	3069-T	5,700 cP
	3069-VT	14,000 cP
	3069-Gel	25,000 cP
		ASTM D-1084
		ASTM D-2556
		ASTM D-2556
		ASTM D-2556

#### TYPICAL CURED PROPERTIES

##### *PHYSICAL*

Durometer Hardness	D55	ASTM D-2240
Tensile at Break	1,700 psi	ASTM D-638
Elongation at Break	175%	ASTM D-638
Thermal Limit (brittle/degrades)	-55° to 180°C (-65° to +350°F)	*DSTM D-200
Water Absorption (24 h)	1.8%	ASTM D-570
Boiling Water Absorption (2 h)	1.3%	ASTM D-570

\*DSTM refers to Dymax Standard Test Method

DYMAX Corporation - 51 Greenwood Road - Torrington, CT 06790 - Phone: 860-482-1010 - Fax: 860-496-0608  
E-mail: [info@dymax.com](mailto:info@dymax.com) - [www.dymax.com](http://www.dymax.com)

DYMAX Europe GmbH - Trakehner Strasse 3 - D-60487 Frankfurt am Main - Germany - Phone: 0049-69-7165-3568  
Fax: 0049-69-7185-3830 - E-mail: [dymaxinfo@dymax.de](mailto:dymaxinfo@dymax.de)

DYMAX<sup>®</sup>, Light-Weld<sup>®</sup>, Light-Welder<sup>®</sup>, Multi-Cure<sup>®</sup>, Ultra Light-Weld<sup>®</sup>, MEDI-CURE<sup>®</sup> and MD<sup>®</sup> are trademarks of DYMAX Corporation



# DYMAX CORPORATION

## PRODUCT DATA SHEET

3069 Series, 5/2000

### TYPICAL LIGHT CURE DATA

Lamp	2000-EC	5000-EC	PC-3	3010-EC
Light Type	UV	UV	UV	UV
Lamp Type	8"x8" Flood	5"x5" Flood	3/16" dia Spot	3/16" dia Spot
Intensity (mW/cm <sup>2</sup> ) at Peak Wavelength	70 @ 365 nm	275 @ 365 nm	2500 @ 365 nm	6000 @ 365 nm
Wavelength (nm) Working Range	300-500	300-500	300-500	300-500
Cure Speed (sec)				
Between Glass	1	1	2	1
1/8" Bead	<60	<30	10	<5
Tack Free Surface Cure	N/A	45	20	10

### DISPENSING AND HANDLING ADHESIVE

Dymax 3069 Series are available in various packages such as syringes, cartridges, bottles, and pails. They may be dispensed with a variety of automatic bench-top syringe applicators or other equipment as required. Direct questions relating to dispensing and curing systems for specific applications to Dymax Tech Center.

Wear impervious gloves and/or barrier cream. Repeated or continuous skin contact with liquid adhesive will cause irritation and should be avoided. Do not wear absorbent gloves. Remove adhesive from skin with soap and water. Never use solvents to remove adhesive from skin or eyes.

### STORAGE AND SHELF LIFE

Store material in cool dark place when not in use. Do not expose to UV light or sunlight. Material may polymerize upon prolonged exposure to ambient light. Replace lid immediately after use. Product has a one-year shelf life when stored below 90°F in the original, unopened container.

### CAUTION

For industrial use only. Avoid breathing vapors. Avoid contact with eyes and clothing. In case of contact, immediately flush with water for at least 15 minutes; get medical attention. Wash clothing before reuse. Keep out of reach of children. Do not take internally. If swallowed, induce vomiting at once and call a physician. Repeated or continuous skin contact with liquid adhesive will cause irritation and should be avoided. For specific information, refer to the Material Safety Data Sheet.

© 2000 Dymax Corporation

The data contained in this bulletin which represents typical results, is furnished for information only, and is believed to be reliable. We cannot assume responsibility for results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any product or method mentioned herein and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use thereof. Nothing in this bulletin is to be interpreted as a representation of freedom from domination of patents owned by others or a license under a Dymax Corporation patent. We recommend that each prospective user test the proposed application before repetitive use, using the data as a guide. For specific information, refer to Material Safety Data Sheet before use.

DYMAX Corporation - 51 Greenwood Road - Torrington, CT 06790 - Phone: 860-482-1010 - Fax: 860-496-0608  
E-mail: [info@dymax.com](mailto:info@dymax.com) - [www.dymax.com](http://www.dymax.com)

DYMAX Europe GmbH - Trakehner Strasse 3 - D-60487 Frankfurt am Main - Germany - Phone: 0049-69-7165-3568  
Fax: 0049-69-7185-3830 - E-mail: [dymaxinfo@dymax.com](mailto:dymaxinfo@dymax.com)

DYMAX®, Light-Weld®, Light-Welder®, Multi-Cure®, Ultra Light-Weld®, MEDI-CURE® and MD® are trademarks of DYMAX Corporation

