

**LIGHT WELD<sup>®</sup> GB310UV**  
**OPTICALLY CLEAR STRUCTURAL ADHESIVE**  
**FOR LARGE AREAS, HIGH IMPACT**

**DESCRIPTION**

Light Weld GB310UV forms optically clear, high performance structural bonds between glass substrates and between glass and metal. Bonds in seconds upon exposure to long wave (365nm) UV light. Light Weld GB310UV is excellent for potting, sealing and bonding. Bonds resist yellowing, vibration, impact and thermal shock.

**TYPICAL UNCURED PROPERTIES**

Solvent Content	None	
Composition	100% Solids	
Appearance	Clear/Straw	
Solubility	Isopropyl Alcohol	
Toxicity	Low	
Flash Point	>95° C (200° F)	
Viscosity	2,500 cP (nominal)	ASTM D-1084

**TYPICAL CURED PROPERTIES***PHYSICAL*

Durometer Hardness	D60	ASTM D-2240
Tensile at Break	3,000 psi	ASTM D-638
Elongation at Break	120%	ASTM D-638
Tensile Compression Shear		
Glass-to-Glass	2,300 psi (glass shatters)	*DSTM D-250
Glass-to-Steel	1,700 psi (glass shatters)	*DSTM D-251
Modulus of Elasticity	35,000 psi	ASTM D-638
Water Absorption (24 h)	1.2%	ASTM D-570
Boiling Water Absorption (2 h)	3.2%	ASTM D-570
Refractive Index	1.50	ASTM D-1218

\*DSTM refers to Dymax Standard Test Method

**CURE DATA** - UV LIGHT - Using 365 nm wavelength UV light <sup>(note 1)</sup>:

	Cure Time ( seconds )	Intensity <sup>( note 3 )</sup> mW/cm	Dymax Light-Welder <sup>®</sup> Lamps
Fixture Between Glass Slides	>1	20	2000-EC
Nominal Cure Depth (0.25")	60	20	2000-EC
Tack Free Cure Time	20	150	5000-EC
	2	2,500	3010-EC

**SAFETY**

Repeated or continuous skin contact with liquid adhesive (“resin”) will cause skin irritation or contact dermatitis, which in some cases, can be severe. Avoid this possibility by wearing impervious gloves and/or a barrier cream. Gloves made of rubber (including latex and any other rubber product) are not impervious. Nitrile (an artificial rubber) is preferred. Do not breathe the vapors from the adhesive. The user must be familiar with the Material Safety Data Sheet for the product before use. UV light can damage your eyes. Read and follow all instructions for the safe use of any UV light source that come with the device.

**DISPENSING & HANDLING ADHESIVE**

Dymax GB310UV is available in various packages such as syringes, cartridges, bottles or pails. It 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 the Dymax Technical Representatives.

**STORAGE AND SHELF LIFE**

Store material in a 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. Refrigerated storage extends shelf life.

**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; for eyes, get medical attention. Wash clothing before reuse. Keep out of the 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.

**NOTES**

- 1 – Use of lamps that emit high levels of short wave light (for example, more than 15% 200-300 nanometer UV light) are not recommended.
- 2 – Nominal intensity taken at a predetermined distance. This reading does not reflect the maximum intensity capabilities emitted from each unit.

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MD<sup>®</sup> Medical Device Adhesives is also a registered trademark of 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 users 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 the Material Safety Data Sheet before use.

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