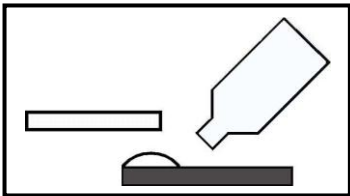


Guidelines for UV Curing Adhesives, Sealants, and Coatings

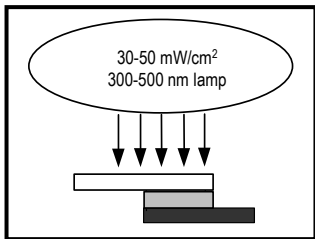
The speed, ease of use, and cost efficiency of Dymax Light Weld[®], Ultra Light-Weld[®], and Multi-Cure[®] UV light-curable adhesives, sealants, and coatings can be easily achieved with proper application and curing procedures. All *Light Weld* resins must be completely exposed to UV light in order to cure.

BONDING - Where at Least One Surface Transmits UV Light

1. **Apply adhesive** drop or bead to one surface.



2. **Join surfaces** to insure optimum surface-to-surface contact. Upon assembly, the adhesive should spread to fill the joint.

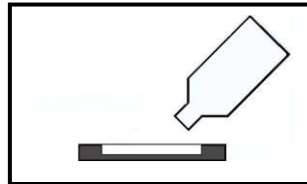


Cure the bonded joint using the proper ultraviolet light for five to ten seconds.

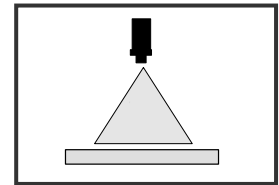
Recommended Lamp: Dymax 2000-EC flood lamp

POTTING, SEALING and COATING

1. **Apply adhesive** to the work piece.

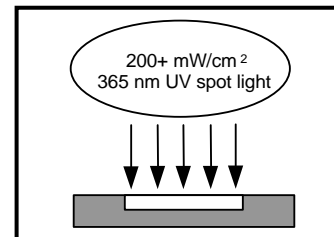


Potting



Spray Coating

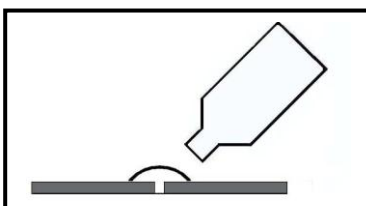
2. **Cure under 365 nm (nanometer) UV light** with an intensity of at least 200+ mW/cm² for two to thirty seconds.



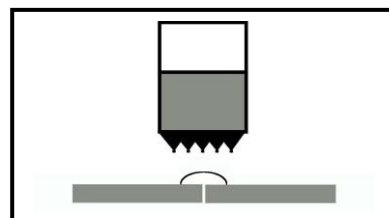
Recommended Lamps: Dymax 5000-EC floodlight, 1200-EC focused beam light, or use a high-intensity electrodeless lamp. See page 2 for curing lamps.

TACKING (Spot Cures)

1. **Apply adhesive** accurately, taking care to ensure a correct drop size.








2. **Cure** under proper UV spot light source for 10 to 25 seconds.



Recommended Lamps: Dymax BlueWave[®] 200

Adhesive Cure Rates with Dymax UV Light-Curing Lamps

Lamp/Type	2000-EC Moderate Intensity UV Flood	5000-EC Higher Intensity UV Flood	BlueWave® 200 High Intensity Spot Lamp	Conveyorized Beam 1200-EC x 2 High Intensity	Conveyorized Electrodeless Lamps
					
Spectral Output of Lamps (nanometers)	250 – 600**	250 – 600**	250 – 600	250 – 600**	250 – 600**
Nominal Intensity (mW/cm ²)	20 – 60	100 – 200	20,000	200 – 275	1,700 – 2,000
TYPICAL ADHESIVE CURE RATE					
Ultra Light-Weld® (UV/Visible cure adhesive)					
Between Surface Cures (glass)	1 – 4 seconds	1 – 3 seconds	1 second	10 – 25 feet/minute	10 – 25 feet/minute
On Surface Cures*	40 – 240 seconds	10 – 40 seconds	1 – 5 seconds	1 – 10 feet/minute	3 – 10 feet/minute
Multi-Cure® and Light Weld® (UV cure adhesive)					
Between Surface Cures (glass)	2 – 6 seconds	1 – 4 seconds	2 seconds	5 – 25 feet/minute	10 – 25 feet/minute
On Surface Cures	30 – 600 seconds	20 – 50 seconds	1 – 5 seconds	1 – 5 feet/minute	1 – 10 feet/minute

Ranges represent the fastest and slowest cure times of Dymax formulations under stated lamps.

* Bulbs with different spectral distributions available.

** Some formulations never achieve a dry surface cure, though most do. The time range stated represents the fastest to the slowest curing products.

REMEMBER TO NEVER EXPOSE SKIN OR EYES TO ULTRAVIOLET LIGHT.



© 2003-2011 Dymax Corporation. All rights reserved. All trademarks in this guide, except where noted, are the property of, or used under license by Dymax Corporation, U.S.A.

The data contained in this bulletin is of a general nature and is based on laboratory test conditions. Dymax does not warrant the data contained in this bulletin. Any warranty applicable to the product, its application and use is strictly limited to that contained in Dymax's standard Conditions of Sale. Dymax does not assume responsibility for test or performance results obtained by users. It is the user's responsibility to determine the suitability for the product application and purposes and the suitability for use in the user's intended manufacturing apparatus and methods. The user should adopt such precautions and use guidelines as may be reasonably advisable or necessary for the protection of property and persons. Nothing in this bulletin shall act as a representation that the product use or application will not infringe a patent owned by someone other than Dymax or act as a grant of license under any Dymax Corporation Patent. Dymax recommends that each user adequately test its proposed use and application before actual repetitive use, using the data contained in this bulletin as a general guide. LIT021 10/25/2012

Dymax Corporation
860.482.1010
info@dymax.com
www.dymax.com

Dymax Oligomers & Coatings
860.626.7006
oligomers&coatings@dymax.com
www.dymax-oc.com

Dymax Europe GmbH
+49 (0) 611.962.7900
info_de@dymax.com
www.dymax.de

Dymax UV Adhesives & Equipment (Shenzhen) Co Ltd
+86.755.83485759
dymaxasia@dymax.com
www.dymax.com.cn

Dymax UV Adhesives & Equipment (Shanghai) Co Ltd
+86.21.37285759
dymaxasia@dymax.com
www.dymax.com.cn

Dymax Asia (H.K.) Limited
+852.2460.7038
dymaxasia@dymax.com
www.dymax.com.cn

Dymax Korea LLC
82.2.784.3434
info@dymax.kr
www.dymax.co.kr