

### ONE-PART UV CURING DOME COATING Light Weld® 4-20508

#### DESCRIPTION

Dymax Light Weld® 4-20508 is a very clear, rigid dome coating that cures in seconds upon exposure to long wave (365 nm) UV light. The clear coating has a high gloss, moderate dome with excellent adhesion to metal, glass, and many plastics. Dymax 4-20508 is best suited for doming novelty items, such as nameplates, keychains, and pens. The coating has a high dome profile. QUV tests suggest that 4-20508 may be suitable for most indoor and some outdoor applications. Users should thoroughly test 4-20508 for suitability in their application.

Applications	<ul style="list-style-type: none"> <li>- Dome Coating Nameplates, Keychains and Pens</li> <li>- Moderate Dome Profile</li> <li>- Rigid and Scratch Resistant</li> <li>- Suitable For Indoor and Some Outdoor Applications</li> </ul>
Benefits Over 2-Part Urethanes	<ul style="list-style-type: none"> <li>- Greater Productivity, Cures In Seconds</li> <li>- Fewer Rejects, Lower Costs</li> <li>- Faster Order Fulfillment Cycle, Shorter JIT Cycle</li> <li>- 100% Automation Can Be Achieved (Dispense, Cure, Inspect &amp; Package)</li> <li>- Regain Floor Space, Eliminate Racks, Ovens, and Shuffling Parts</li> <li>- No Two-Part Resin Waste or Disposal Costs</li> <li>- Mercury-Free and Isocyanate-Free</li> </ul>

#### TYPICAL UNCURED PROPERTIES (not specifications)

Solvent Content	None, 100% Reactive Solids	
Composition	Urethane Acrylate/Acrylate Blend	
Appearance	Clear	
Solubility	Isopropyl Alcohol, Ketones, And Chlorinated Solvents	
Toxicity	Low	
Flash Point	>95°C (200°F)	
Viscosity (@ 20 rpm)	735 cP (nominal)	ASTM D-1084

#### TYPICAL CURED PROPERTIES (not specifications)

Durometer Hardness	D80	ASTM D-2240
Gardner Color	1	
Refractive Index	1.50	

#### TYPICAL CURE SCHEDULES using 365 nm UV Light:

	Cure Time	Intensity mW/cm <sup>2</sup>	Dymax Light-Welder® Lamps
Coating Cures, stationary lamp	15 sec	150	5000-EC
Nominal Cure Depth (0.25 inch)	30 sec	35	2000-EC
Coating Cures, conveyor	>7 ft/min	350	UVC6/12002
Coating Cures, conveyor	>5 ft/min	1000	UVC6/F300 <sup>†</sup>

<sup>†</sup> Recommend D-bulb

### DISPENSING AND HANDLING ADHESIVE

Dymax 4-20508 is available in various packages such as syringes, cartridges, bottles, and pails. It may be dispensed with a variety of automatic bench-top applicators or other equipment as required. Direct questions relating to dispensing and curing systems for specific applications to the Dymax Technical Center at (860) 482-1010.

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 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.

### 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 product Material Safety Data Sheet.

© 2002 Dymax Corporation

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 a 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.

**DYMAX Corporation** - 318 Industrial Lane - 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: (49) 69-7165-3568  
Fax: (49) 69-7185-3830 - E-mail: [dymaxinfo@dymax.de](mailto:dymaxinfo@dymax.de)



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