

## Light Weld® 4-20508 One-Part UV Curing Dome Coating

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 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

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**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. Please direct any questions relating to dispensing and curing systems for specific applications to Dymax Application Engineering.

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.