

**DYMAX CORPORATION****PRELIMINARY  
PRODUCT DATA SHEET****ONE-PART UV CURING DOME COATING  
Light Weld® 4-20577****DESCRIPTION**

Dymax Light Weld® 4-20577 is a clear, flexible dome coating that cures in seconds upon exposure to long wave (365 nm) UV light. The coating has a high dome profile. Light-Weld 4-20577 was designed to adhere to polyester labels. QUV tests suggest that 4-20577 may be suitable for most indoor and some outdoor applications. Users should thoroughly test 4-20577 for suitability in their application. Dymax 4-20577 is best suited to coating decals less than 1.5" (4 cm) long.

Applications	<ul style="list-style-type: none"> <li>- Dome Coating for Small and Medium Sized Polyester Labels</li> <li>- Clear Soft, Flexible, High Dome Profile</li> <li>- Scratch Resistant, Springs Back When Dented</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 Has Been 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)	1,500 cP (nominal)	ASTM D-1084

**TYPICAL CURED PROPERTIES (not specifications)**

Durometer Hardness	A70	ASTM D-2240
Water Absorption (24 hr)	0.6%	ASTM D-570

**STARTING POINT CURE SCHEDULE**

The larger and more flexible the substrate, the more work it takes to optimize the cure cycle to produce a clear dome with no warpage. Higher intensity lamps may cure the surfaces faster but when used alone they may warp flexible substrates.

Substrate	Preconditioning Lamp	Dymax Light-Welder® Lamp
<b>Rigid Substrates:</b> metal, glass wood or plastic	Unnecessary unless substrate warps on cure	30 seconds, stationary lamp, 5000-EC or 12 ft/min, UVC6/12002 conveyor or 10 ft/min, UVC6/F300 conveyor
<b>Flexible Substrates:</b> Decals, Labels Foil, polyester	4 minutes @ 0.5-2.0 mW/cm <sup>2</sup> 365 nm blacklight	10-15 seconds 2000-EC <sup>†</sup> 10 ft/min, UVC6/F300 conveyor

<sup>†</sup> Order optional bulb (P/N 36970) with 2000-EC (Flood lamp with 8"x8" cure area)

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# DYMAX CORPORATION

## PRELIMINARY PRODUCT DATA SHEET

4-20577, 5/8/2002

### DISPENSING AND HANDLING ADHESIVE

Dymax 4-20577 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.

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