

**LIGHT WELD[®] 4-20429
ONE-PART UV-CURABLE, DOME COATING**

DESCRIPTION

Dymax Light Weld 4-20429 is a clear, flexible dome coating that cures in seconds upon exposure to UV light. The clear coating has a high dome profile and adheres to paper, metal, glass, and many plastics. Coating decals up to 10 inches across are possible due to its low shrinkage.

- Clear Dome
- Large Labels
- Good Weather Resistance
- Compatible with UV Inks
- No 2-part Waste or Disposal Costs
- Mercury-free and Isocyanate-free

TYPICAL UNCURED PROPERTIES

Solvent Content	None, 100% Reactive Solids	
Composition	Urethane Acrylate and Acrylate Blend	
Appearance	Clear to slight haze*	
Solubility	Isopropyl alcohol, Ketones, chlorinated solvents	
Toxicity	Low	
Flash Point	>95°C (200°F)	
Density	0.97 kg/L (8.3 lbs/gallon)	
Viscosity	1,700 cP	ASTM D-1084

*A slight haze may be noticed in drums and pails. 4-20429 cures clear to depths of several inches.

TYPICAL CURED PROPERTIES

PHYSICAL

Durometer Hardness	A50	ASTM D-2240
Elongation at Break	120%	ASTM D-638
Thermal Limit (brittle/degrades)	<100° to 175°C	
Glass Transition Temperature, T _g	<-85°C	ASTM D-3248
Gardner Color	1	
Refractive Index	1.50	

CURE SCHEDULE

	<u>Cure Time</u>	<u>Intensity</u> ^[1] <u>mW/cm²</u>	<u>Dymax Light-Welder[®]</u> <u>Lamps</u>
Nominal Cure Depth (0.25 inch)	60 sec	20	2000-EC
Coating Cures Tack Free	15-25 sec	35	2000-EC*
Coating Cures Tack Free	25 sec	150	5000-EC
Coating Cures Tack Free	8 ft/min	350	UVC6/12002
Coating Cures Tack Free	8 ft/min	1000	UVC6/F300

*For coating paper and mylar labels use a black light followed by 2000-EC with optional bulb (P/N 36970). Domes on rigid substrates can be cured with one lamp (recommend 5000-EC or conveyors).

DISPENSING AND HANDLING ADHESIVE

Dymax 4-20429 is available in various packages such as syringes, cartridges, bottles, and 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 Dymax Technical Representatives.

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 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. 4-20429 becomes very cloudy when cold. Warm to 100°F to restore clarity.

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.

NOTES

[1] Nominal intensity taken at a predetermined distance. This reading does not reflect the maximum intensity capabilities emitted from each unit.

4-20429.DOC 052799

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