

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. This product is in full compliance with RoHS directives 2015/863/EU.

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

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 ²)	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 [†]

[†] 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. This material has an 18-month shelf life from date of manufacture, unless otherwise specified, when stored between 10°C (50°F) and 35°C (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.

GENERAL INFORMATION

This product is intended for industrial use only. Keep out of the reach of children. Avoid breathing vapors. Avoid contact with skin, eyes, and clothing. Wear impervious gloves. Repeated or continuous skin contact with uncured material may cause irritation. Remove material from skin with soap and water. Never use organic solvents to remove material from skin and eyes. For more information on the safe handling of this material, please refer to the Safety Data Sheet before use.

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