

ULTRA LIGHT-WELD® 4-20260
HIGH PERFORMANCE GLASS ADHESIVE

INTRODUCTION

Dymax Ultra Light-Weld adhesives can be cured with UV or visible light. Ultra Light-Weld adhesives provide faster, deeper cures, increase productivity, lower assembly costs and enhance worker safety. When cured with Dymax Light-Welder® UV lamps, these adhesives provide optimum process flexibility. They allow the user to select the optimum combination of adhesive and cure mechanism to meet individual process and performance requirements.

DESCRIPTION

Ultra Light-Weld 4-20260 bonds in seconds to glass substrates upon exposure to either longwave UV or visible light. It forms tough, clear bonds and is excellent for adhering to clear as well as tinted glassware. These durable bonds are dishwasher safe and exhibit exceptional tensile strength as well as vibration and impact resistance. Acceptable bonds form to a variety of other substrates such as ceramic, ferrite and metal surfaces.

TYPICAL USES	SPECIAL FEATURES	BENEFITS
Glass/Brick Assembly Stemware Glass Cases	Bond Tinted/Colored Glass	Bond tinted (UV-blocked glass) with visible light
	Visible Light or UV Cure Capability	Faster cures with Dymax Light-Welder® UV lamps
	Adhesion/Toughness	Flexible, tough moisture resistant bonds

UNCURED PROPERTIES

Solvent Content	None - 100% reactive solids	
Chemical Class	Urethane (Meth) Acrylate	
Appearance	Clear	
Solubility	Alcohols/Chlorinated Solvents/Ketones	
Toxicity	Low	
Flash Point	>93°C (200°F)	
Viscosity (20 rpm)	4,000 cP (nominal)	ASTM D-1084

CURED PROPERTIES

<i>PHYSICAL</i>	<i>Data</i>	<i>Test Method</i>
Durometer Hardness	D80	ASTM D-2240
Elongation at Yield	9%	ASTM D-638
Tensile at Yield	6,100 psi	ASTM D-638
Water Absorption (24 hr)	0.7%	ASTM D-570

Boiling Water Absorption (2 hr)	3.7%	ASTM D-570
Linear Shrinkage	1.9%	*DSTM D-101
Thermal Limit (brittle/degrades)	-51° to 149°C (-60°/+300°F)	DSTM D-200

*DSTM refers to Dymax Standard Test Method

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TYPICAL LIGHT CURE DATA

Lamp	2000-EC	5000-EC	PC-3	3010-EC
Light Type	UV	UV	UV	UV
Lamp Type	Flood	Flood	Spot	Spot
Intensity (mW/cm ²) at Peak Wavelength	50 @ 365 nm	2000 @ 365 nm	1000 @ 365 nm	1800 @ 365 nm
Wavelength (nm) Working Range	300-500	300-500	300-500	300-500
Cure Speed (sec)				
Between Glass	1	<1	<1	<<1
1/8" Bead	30-60	25	20	10
Surface Cure	60-120	35	20	10
Cure Depth after 1 Minute (inch)	0.25	0.25	0.25	0.5

DISPENSING AND HANDLING ADHESIVE

Ultra Light-Weld 4-20260 is packaged in a variety of containers. It may be dispensed with a variety of automatic bench-top syringe applicators or other equipment as required. For specific technical recommendations relating to dispensing and curing systems, call Dymax Technical Service at (860) 482-1010.

Repeated or continuous direct skin contact should be avoided. The use of barrier hand cream and plastic gloves are recommended. Do not wear absorbent gloves. Do not wear jewelry. Adhesive may be removed with hand soap and water. Avoid eye contact. Wipe excess wet adhesive off parts with paper towels and remove cured residue with chlorinated solvents, Freon, methanol or ethanol. See CAUTION below.

STORAGE AND SHELF LIFE

Do not expose to UV or visible light source or sunlight. Ultra Light-Weld 4-20260 has a minimum one year shelf life when stored below 32°C (90°F) out of sunlight in original, unopened container. Material can polymerize upon prolonged exposure to ambient light. Replace lid immediately after pouring. Keep covered at all other times.

CAUTION

For industrial use only. Avoid breathing vapors. Avoid contact with eyes and clothing. In case of skin contact, immediately flush with water for at least 15 minutes; for eyes, get medical attention. Wash clothing before reuse. Keep out of reach of children. Do not take internally. If swallowed, vomiting should be induced at once and a physician called. For specific information, refer to the product Material Safety Data Sheet before use.

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