

DYMAX CORPORATION

PRODUCT DATA SHEET

ONE-PART UV CURING DECORATIVE COATING ULTRA LIGHT-WELD[®] ADHESIVE 4-20638

DESCRIPTION

Dymax Ultra Light-Weld 4-20638 is a clear, decorative coating that cures in seconds upon exposure to long wave (365 nm) UV light. The coating has a low viscosity for thin coating applications and resists many solvents. 4-20638 has good adhesion to plastics, metal, glass and decals. QUV tests suggest that 4-20638 may be suitable for most indoor and some outdoor applications. Users should thoroughly test 4-20638 for suitability in their application. Dymax 4-20638 is best suited to coating novelty items, such as knives and nameplates.

- **Clear, High Gloss**
- **Slick, Abrasion Resistant Surface**
- **Low Viscosity**
- **Fast Curing**
- **No Isocyanates**

UNCURED PROPERTIES

Solvent Content	None	
Composition	100% Solids, Urethane acrylate	
Appearance	Clear	
Solubility	Isopropyl alcohol, ketones, and chlorinated solvents	
Toxicity	Low	
Flash Point	>95°C (200°F)	
Viscosity (@ 20 rpm)	65 cP (nominal)	ASTM D-1084

CURED PROPERTIES

PHYSICAL

Durometer Hardness	D85	ASTM D-2240
Tensile at Break	4,200 psi	ASTM D-638
Modulus of Elasticity	625,000 psi	ASTM D-638
Elongation	2.3%	ASTM D-638
Water Absorption (24 hr)	0.2%	ASTM D-570
Boiling Water Absorption (2 hr)	1.3%	ASTM D-570

CURE DATA

UV Light - Using 365 nm wavelength UV light ^[1]:

	<u>Cure Time</u>	<u>Intensity</u> ^[2] <u>mW/cm²</u>	<u>Dymax Light-Welder</u> [®] <u>Lamps</u>
Coating Cures	20 sec	150	5000-EC
Coating Cures	15 ft/min	350	UVC6/12002
Coating Cures	15 ft/min	1,000	UVC6/F300
Nominal Cure Depth (0.12 inch)	10 sec	150	5000-EC

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4-20638, 2/2002

DISPENSING AND HANDLING ADHESIVE

Dymax 4-20638 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 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.

NOTES

1. Use of lamps that emit high levels of short wave light (for example, more than 15% 200-300 nanometer UV light) are not recommended.
2. Nominal intensity taken at a predetermined distance. This reading does not reflect the maximum intensity capabilities emitted from each unit.

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