

MULTI-CURE[®] 9-20557 THERMAL SHOCK RESISTANT CONFORMAL COATING

DESCRIPTION

Dymax Multi-cure[®] 9-20557 forms a tough clear circuit encapsulant upon exposure to longwave UV light or visible light. Multi-cure[®] 9-20557 is excellent for encapsulating, potting, sealing and bonding. Coating resists yellowing, vibration, impact and thermal shock. The Coating exhibits excellent adhesion to most solder masks, and fluoresces for easy in-line quality control. Multi-cure[®] 9-20557 has secondary heat cure capability.

TYPICAL UNCURED PROPERTIES

Solvent Content	None	
Composition	100% Solids	
Appearance	Clear/Straw	
Solubility	Isopropyl alcohol	
Toxicity	Low	
Flash Point	>95°C (200°F)	
Viscosity	2,500 cP (nominal)	ASTM D-1084

TYPICAL CURED PROPERTIES

PHYSICAL

Durometer Hardness	D60	ASTM D-2240
Elongation at Break	120%	ASTM D-638
Tensile at Break	3,000 psi	ASTM D-638
Modulus of Elasticity	35,000 psi	ASTM D-638
Thermal Limit	-55° to 200°C	DSTM* D-200
Water Absorption (24 h)	1.2%	ASTM D-570
Boiling Water Absorption (2 h)	3.2%	ASTM D-570
Volume Shrinkage	6.2%	
Refractive Index	1.50	ASTM D-1218
Dielectric Constant, 1 MHz	3.27	ASTM D-1304

*DSTM refers to Dymax Standard Test Method

TYPICAL CURE DATA

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

	Cure Time (seconds)	Intensity ^[2] mW/cm ²	Dymax Light-Welder [®] Lamps
Fixture between glass slides	>1	20	2000-EC
Nominal cure depth (0.25 inch)	45	20	2000-EC
Tack free cure time	15	150	5000-EC
	2	2,500	3010-EC

DISPENSING AND HANDLING ADHESIVE

Dymax 9-20557 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. Refrigerated storage extends shelf life.

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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