## SELECTION of Dymax LIGHT-CURABLE MATERIALS for MOBILE PHONE ASSEMBLY

Product Name	Cure Method(s)	Fluorescing	Typical Applications	Features	Industry Approvals	Standard Nominal Viscosity (cP)	Additional Viscosities (cP)	Shore Hardness	Tensile at Break MPa [psi]	Modulus of Elasticity MPa [psi]	Halogen-Fre Reports Available?
РСВ	•										
9481-E	UV/visible Light + Moisture	Blue	Conformal Coating	Dual-Cure secondary moisture cure for shadowed areas; solvent free	MIL-I-46058C, IPC-CC-830B, UL 94 V0, UL 746-E	125		D75	-	150 [21,800]	HALOGEN
9-20351-UR	UV/visible Light + Heat	Red	Conformal Coating	Ultra-Red fluorescing; flexible; high viscosity for thick selective coating; solvent-free; Isocyanate free		14,000	1	D60	7.6 [1,000]	19 [2,700]	HALOGEN
9-20557	UV/visible Light + Heat	Blue	Conformal Coating	Flexible; medium viscosity coating for thin coating applications; solvent free; Isocyanate free	MIL-I-46058C, IPC-CC-830B, UL 94 V1	2,300	800	D60	21 [3,000]	34 [4,900]	HALOGEN
3086-T	UV/visible Light		Sealing; Bonding; Tamper Proofing	Adhesion to various substrates; medium viscosity	UL 94 V0	6,700	135	D85	50 [7300]	11/10/1	Pending
9001-E-V.1	UV/visible Light + Heat		Staking; Encapsulation	High viscosity; excellent adhesion to PCB and components	3930	4,500	400 • 17,000 • 50,000	D45	5.2 [750]	17 [2,500]	HALOGEN
9008	UV/visible Light	Blue	Strain Relief	Flexible; excellent adhesion to polyimide	20112 h	4,500		A85	6.2 [900]	y .	HALOGEN
9422-SC*	UV/visible Light	-	BGA/VGA Reinforcement; Staking; Damming	See-Cure; high viscosity; highly thixotropic material	12	37,500	· /-	D50	16 [2,300]	98 [14,000]	HALOGEN
KEYPAD MO	LDING and BONDI	NG									
9662	UV/visible Light		Keypad Molding	High-pencil hardness and adhesion to PET, PC	-	1,600		D80	35 [5,100]	660 [96,000]	HALOGEN
3094	UV/visible Light	-	Keypad Bonding	Adhesion to various substrates including PC and lens materials		1,000	9,000 • 25,000	D62	14 [2,100]	240 [35,000]	Pending
HOUSING/CA	AMERA LENS ASS	EMBLY									
GA-140	UV/visible Light	3	Gasket	Form-In-Place/Cure-In-Place gasket; designed for applications requiring a tack-free surface	·	39,000	C741	A35	1.5 [211]	0.71 [104]	Pending
3069-T	UV/visible Light	Z-7	Camera Lens Assembly	Adhesion to various substrates including LCP and TPU materials		6,000	450 • 14,000 • 25,000	D55	12 [1,700]	170 [25,000]	Pending
3094	UV/visible Light	200	Keypad Bonding	Adhesion to various substrates including PC and lens materials	-	1,000	9,000 • 25,000	D62	14 [2,100]	240 [35,000]	Pending
DISPLAY											
9641-LV	UV Light	Sa /- 1	Optical Bonding	Low durometer; optimized for touch screen or cover- plate bonding		1,100	2,000	00-55	0.24 [35]	0.14 [20]	Pending
9-20737	UV/visible Light	1	Display Sealing	Highly thixotropic for sealing gaps between screen and frame		11,000	7-6	D55	14 [2,000]	a -0	HALOGEN FREE
MICRO SPEA	AKERS										
9-20763	UV/visible Light	-114	Speaker Assembly	Black color; high adhesion to voice coil and membranes		13,000	16	D60	37 [5,300]	14 [21,000]	Pending
9671	UV/visible Light	-	Speaker Assembly	Red color; high adhesion to LCP, voice coil		65,000	194.	D45	5.1 [750]	17 [2,500]	Pending

**Smart Phone Applications** Flex Circuit - Bonding Camera - Lens Module Assembly Masking LED Coating LCD - Laminating LCD - Form-in-Place Gasket Navigation Assembly PCB - Conformal Coating IC - Ruggedization (Underfill Replacement) Keyboard - Conformal Coating Tamper Proofing

## **Environmental Benefits** of Dymax Light-Curing Materials:

- No VOCs
- Solvent Free
- HAP Free
- No Energy Required for Curing Ovens
- Documented Halogen-Free Grades

Dymax Halogen-Free conformal coatings, adhesives, and encapsulants are documented by an independent laboratory to meet or exceed standards set forth in IEC 61249-2-21. This international directive defines halogen-free as <900 ppm for chlorine, <900 ppm for bromine and < 1500 ppm total level of both combined. The current test method used for certification is BS EN

## \* Non-See-Cure version is 9-20790



**CCM** Assembly & FPC Attach with 3069-T & 9001-E Series



FPC to Glass Strain Relief



UV Keypad Molding with 9662



Micro Speaker Assembly with



Keys Bonded to TPU Backing with 3094



Touch Screen PCB Conformal Optically Coating with Bonded with 9481-E

9641-LV



Peelable Mask 9001-E-V3.1



with 9422-SC

## **See-Cure Color Change Technology**

The two most often asked questions in the adhesive/coating industry are:



■ "How can I tell where the material has been dispensed?" "How do I know it is cured?"

After exposure to UV light, the color changes from blue to clear. Color change occurs after cure. This cure indicator ensures the material is completely cured, providing a critical safety feature for manufacturing processes.



