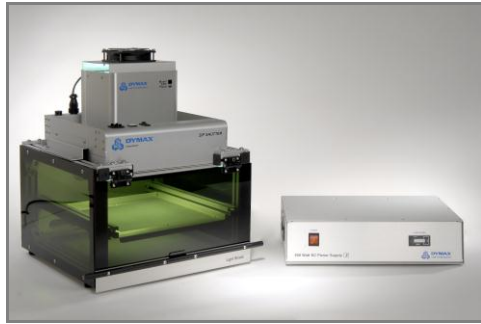
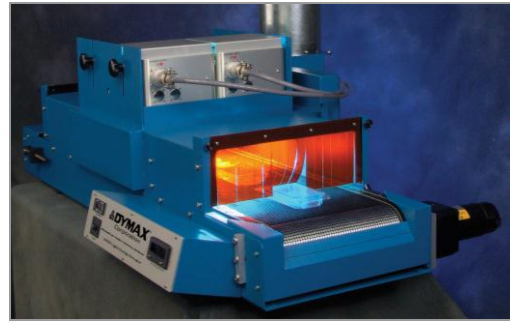


## Curing Equipment and Processing Monitoring

Successful UV processing demands that the curing equipment be matched to the resin to optimize both performance and cost savings. DYMAX manufactures light-curable resins and light-curing equipment, and specializes in the optimization of UV-curing processes. Our technical specialists are ready to help you optimize your process, and maximize your profit and product performance.



DYMAX 5000 Flood Lamp Systems  
*Most Popular and Versatile*  
Ideal for batch processing



DYMAX UVCS Series UV Curing  
Conveyor Systems  
Ideal for fully automated processes



DYMAX BlueWave<sup>®</sup> LED Prime UVA  
Spot-Curing System  
Ideal for spot-curing small areas



ACCU-CAL<sup>™</sup> 50 Radiometer  
for process monitoring.



# Mobile Phone Assembly

UV Light-Curable Adhesives, Coatings,  
and Encapsulants for Mobile Phone Assembly

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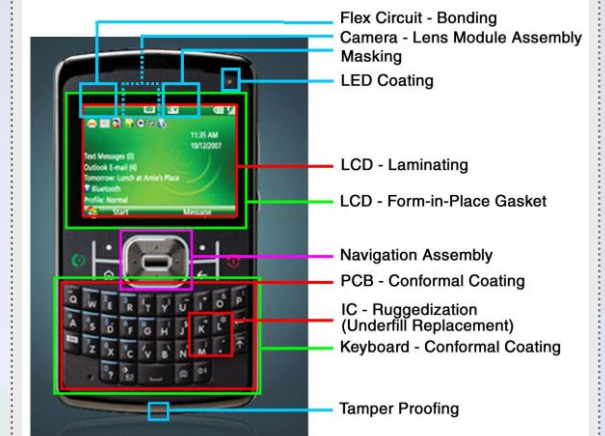


# SELECTION of DYMAX LIGHT-CURABLE MATERIALS for MOBILE PHONE ASSEMBLY

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-Free Reports Available?
<b>PCB</b>											
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]	HF HALOGEN FREE
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	-	D60	7.6 [1,000]	19 [2,700]	HF HALOGEN FREE
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]	HF HALOGEN FREE
3086-T	UV/visible Light	-	Sealing; Bonding; Tamper Proofing	Adhesion to various substrates; medium viscosity	UL 94 V0	6,700	135	D85	50 [7300]	-	Pending
9001-E-V.1	UV/visible Light + Heat	-	Staking; Encapsulation	High viscosity; excellent adhesion to PCB and components	-	4,500	400 • 17,000 • 50,000	D45	5.2 [750]	17 [2,500]	HF HALOGEN FREE
9008	UV/visible Light	Blue	Strain Relief	Flexible; excellent adhesion to polyimide	-	4,500	-	A85	6.2 [900]	-	HF HALOGEN FREE
9422-SC*	UV/visible Light	-	BGA/VGA Reinforcement; Staking; Damming	See-Cure; high viscosity; highly thixotropic material	-	37,500	-	D50	16 [2,300]	98 [14,000]	HF HALOGEN FREE
<b>KEYPAD MOLDING and BONDING</b>											
9662	UV/visible Light	-	Keypad Molding	High-pencil hardness and adhesion to PET, PC	-	1,600	-	D80	35 [5,100]	660 [96,000]	HF HALOGEN FREE
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
<b>HOUSING/CAMERA LENS ASSEMBLY</b>											
GA-140	UV/visible Light	-	Gasket	Form-In-Place/Cure-In-Place gasket; designed for applications requiring a tack-free surface	-	39,000	-	A35	1.5 [211]	0.71 [104]	Pending
3069-T	UV/visible Light	-	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	-	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
<b>DISPLAY</b>											
9641-LV	UV Light	-	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	-	Display Sealing	Highly thixotropic for sealing gaps between screen and frame	-	11,000	-	D55	14 [2,000]	-	HF HALOGEN FREE
<b>MICRO SPEAKERS</b>											
9-20763	UV/visible Light	-	Speaker Assembly	Black color; high adhesion to voice coil and membranes	-	13,000	-	D60	37 [5,300]	14 [21,000]	Pending
9671	UV/visible Light	-	Speaker Assembly	Red color; high adhesion to LCP, voice coil	-	65,000	-	D45	5.1 [750]	17 [2,500]	Pending

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

## Smart Phone Applications



## Environmental Benefits of DYMAX Light-Curing Materials:

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

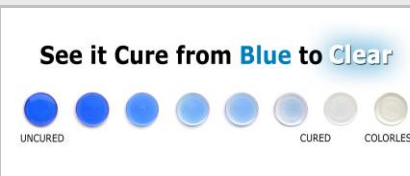


DYMAX Halogen-Free conformal coatings, adhesives, and encapsulants are documented by an independent laboratory to meet or exceed standards set forth in IEC 61249-2-21. This international directive defines halogen-free as <900 ppm for chlorine, <900 ppm for bromine and < 1500 ppm total level of both combined. The current test method used for certification is BS EN 14582:2007.

CCM Assembly & FPC Attach with 3069-T & 9001-E Series	FPC to Glass Strain Relief with 9008	UV Keypad Molding with 9662	Micro Speaker Assembly with 9671	Keys Bonded to TPU Backing with 3094	Touch Screen Optically Bonded with 9641-LV	PCB Conformal Coating with 9481-E	Peelable Mask	Glob Top with 9001-E-V3.1	IC Ruggedizing 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.