

# UV-CAST™ Keypad Coatings

DYMAX UV-CAST™ keypad coatings maximize design flexibility while performing to stringent interface requirements. The UV-CAST molding process enables instant fabrication of various keypad contours, shapes, and textures. Setup costs are minimal compared to similar performing keypads that require injection molds.



## BENEFITS of UV-CAST KEYPADS vs. OTHER SYSTEMS

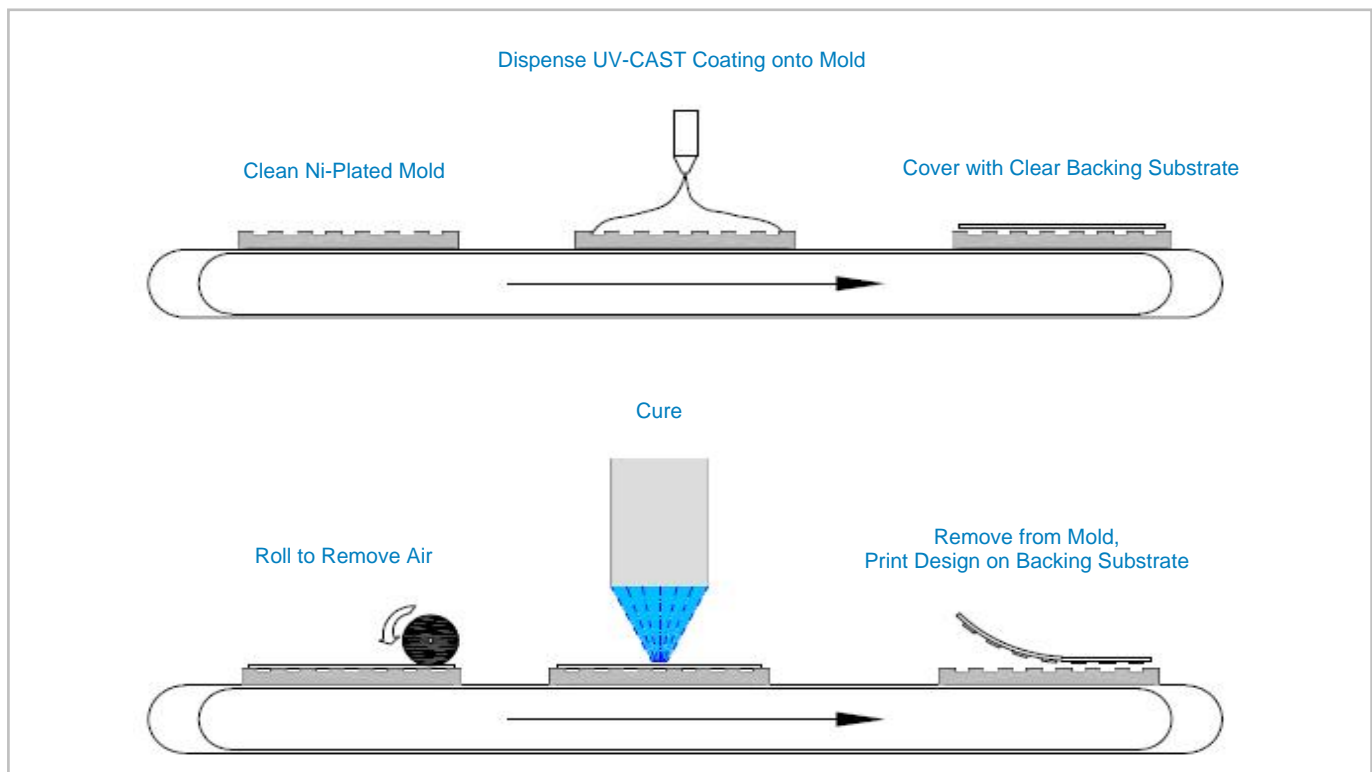
- Eliminates high costs of injection molding tooling and energy use
- Fast prototyping
- Minimal design change cost
- Wide range of coloring options
- Enables any image design to be placed on back of keypad
- Supports ultra-thin device form factors
- Facilitates 3-D designs for contoured profiles and enhanced tactile response
- Ease of visual inspection

## TYPICAL APPLICATIONS

- Mobile phones, PDAs
- Laptop computers
- Automotive controls
- Digital music players
- GPS (global positioning systems)

## UV-CAST PERFORMANCE FEATURES

- Easy application
- Ultra-fast cure in seconds
- High clarity
- Long-term, high resistance to sunlight, lotions, chemicals, abrasion, and scratching
- Silicone free





## ENVIRONMENTAL BENEFITS of UV-CAST™

- No VOCs
- Solvent free
- Halogen-free
- HAP-free
- Minimal energy use in molding and curing
- RoHS compliant

## TYPICAL COST SAVINGS of UV-CAST MATERIALS:

- Reduced energy use
- Improved productivity from high throughput of rapid curing
- Reduced floor space
- Capital and maintenance costs of injection molding equipment, solvent management, and mixing eliminated
- Avoid cost of silicone containment

## PRODUCT SPECIFICATIONS

Product	9662	9663
Typical Applications	Keypad Forming	Keypad Forming
Features	High viscosity for thick keypad profiles	Low viscosity for bubble-free dispensing, low outgassing
Recommended Thickness	0.10 – 0.25 mm [0.004-0.010 in]	0.10 – 0.25 mm [0.004-0.010 in]
Viscosity	1,600 cP	600 cP
Durometer Hardness	D80	D80
Pencil Hardness	HB	HB
Cured Color	Clear	Clear
Recommended Backing Substrates	PC, Treated PET	PC, Treated PET
Recommended Mold Material	Nickel Plated	Nickel Plated
<b>Product Cure Data*</b>		
Lamp	Lamp Intensity	Approximate Exposure or Belt Speed
5000-EC Flood Lamp System	200 mW/cm <sup>2</sup>	< 3 sec
UVCS Conveyor with 5000-EC	200 mW/cm <sup>2</sup>	4.8 m/min [16 fpm]
UVCS Conveyor with Fusion D Lamps	2700 mW/cm <sup>2</sup>	6.1 m/min [20 fpm]

\* Cure times based on laboratory conditions.



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