

# 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

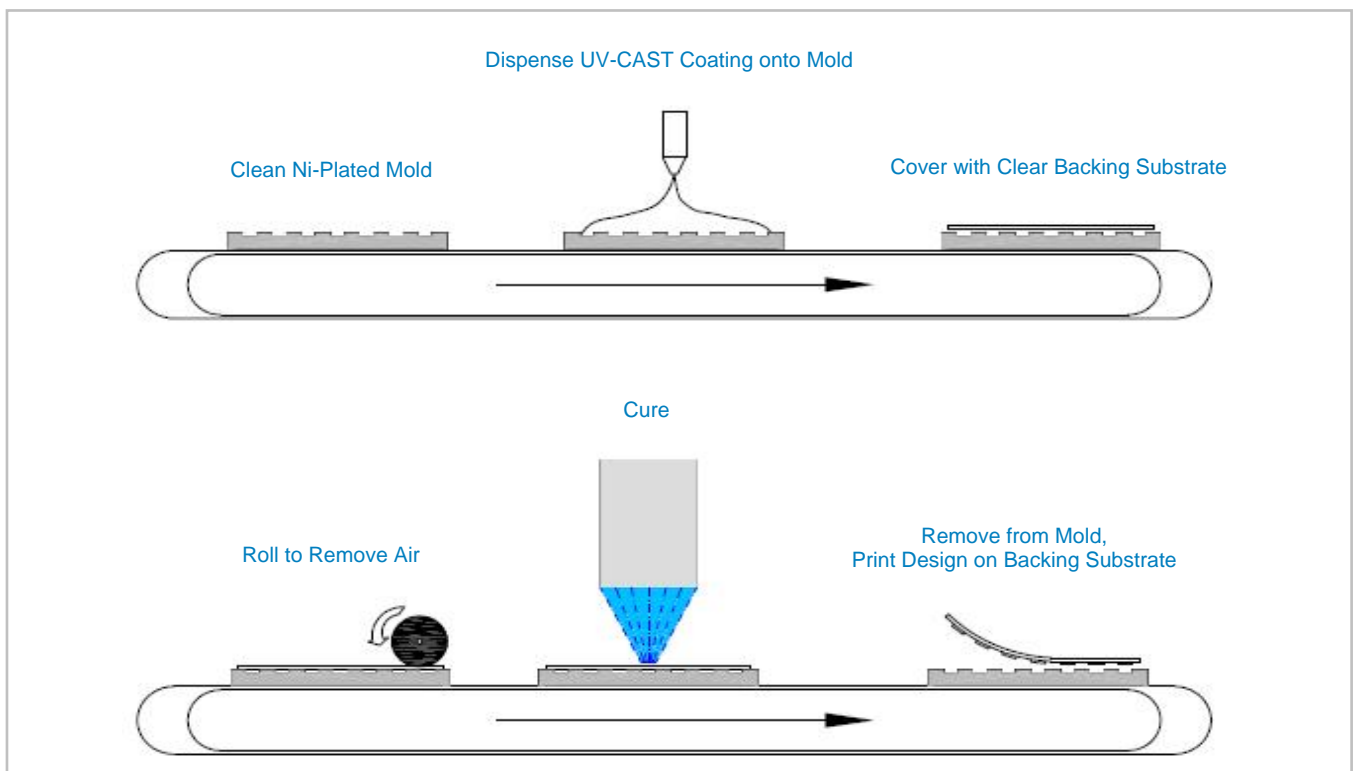
- Eliminates high costs of injection molding tooling and energy use
- Fast prototyping
- Minimal design change cost
- Wide range of coloring options
- Enables any image design to be placed on back of keypad
- Supports ultra-thin device form factors
- Facilitates 3-D designs for contoured profiles and 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, mm [in]	0.10 – 0.25 [0.004-0.010]	0.10 – 0.25 [0.004-0.010]
Viscosity, cP	1,600	600
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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