

# LIGHT CAP<sup>®</sup> High Performance LED Protection

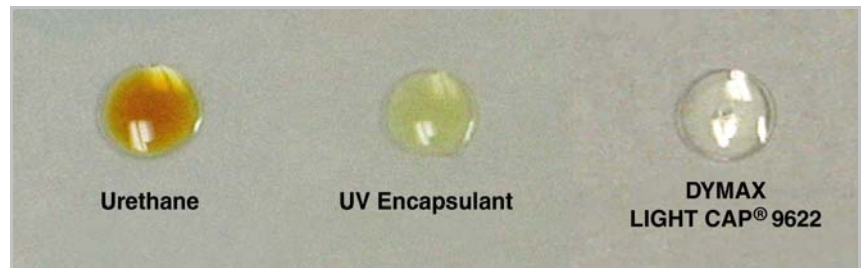
**NEW** LIGHT CAP<sup>®</sup> potting materials cure in seconds to provide optimal protection of LEDs. *LIGHT CAP* materials are designed to endure higher operating temperatures, resist yellowing and transmit more light than competitive technologies. Offering better clarity, at

higher temperatures than traditional epoxy, urethane, or UV doming resins, *LIGHT CAP* resins keep LED lighting brighter over time. *LIGHT CAP* resins are low stress, so fragile COB wire bonds are not compromised during thermal excursions or normal operating environments.



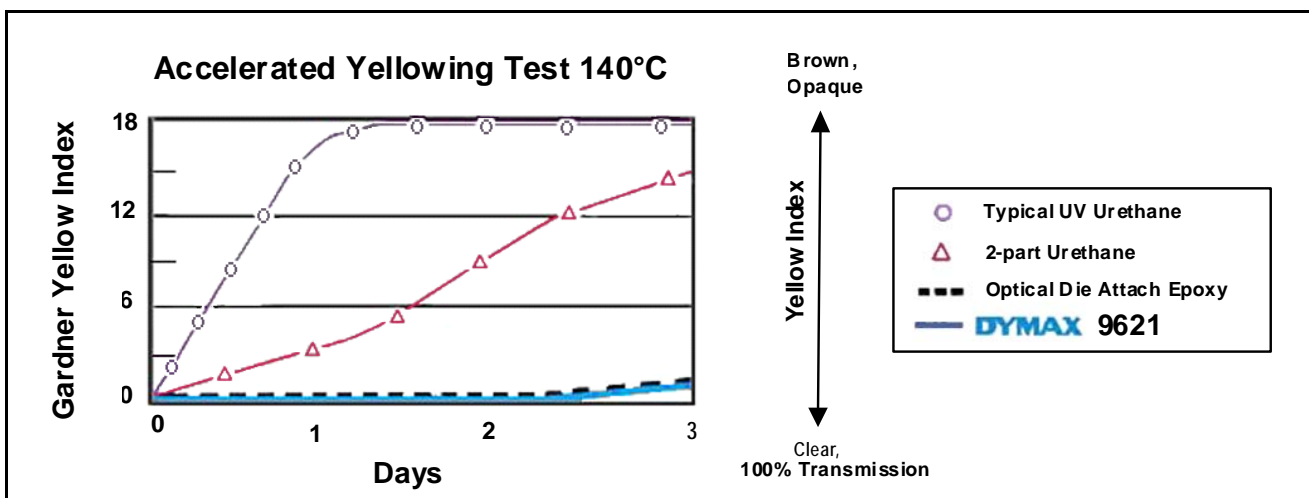
## Make LEDs Brighter and Increase Production Efficiency

Designed for higher power LEDs	Cure in seconds
Enhance light transmittance	Lower reject rates
Resist heat-induced yellowing	One part, no mixing
Optically clear	Solvent free, no VOCs



6 Months at 100°C

## DYMAX Heat-Resistant LED Coatings

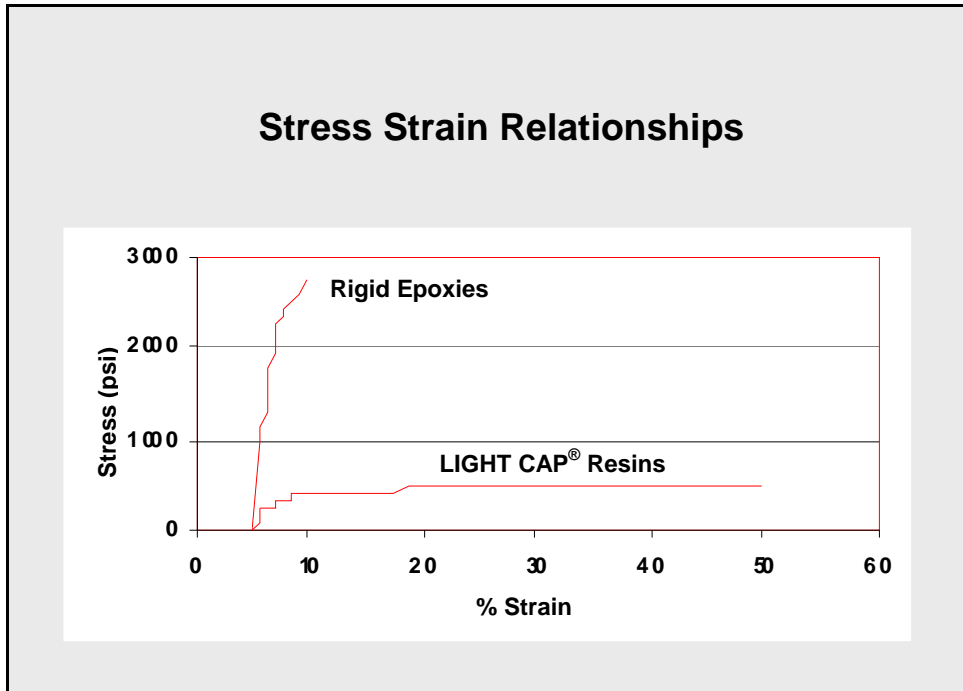


# Die Attach Encapsulants Offer the Highest Ionic Purity

LIGHT CAP<sup>®</sup> resins combine high ionic purity with low shrinkage and assure that delicate wire bonds do not break and result in rejects. Request the paper *Stress in Bonded Optics II* (literature Lit262) for a full discussion of the cushioning properties of LIGHT CAP resins. Similar to the DYMAX 9001 Series materials, LIGHT CAP resins reduce both stress and strain on wire bonds and create durable assemblies.

## Typical Ionic Content

Extractable Chloride	<10 ppm	IC
Sodium	<10 ppm	ICP
Potassium	<10 ppm	AA
Fluoride	<10 ppm	IC



LED Lighted Elevator Letter



LED Light

# LIGHT CAP<sup>®</sup> Resins

High-Performance Acrylate Resins, for High-Output LEDs, Resist Yellowing to 100°C

Product	Viscosity	Description
9620	23,000 (mPas)	High viscosity for dome shape; UV-only cure for enhanced heat resistance
9621	20,000 (mPas)	High viscosity for dome shape; UV/Visible cure for fastest cure and maximum depth
9622	12,000 (mPas)	Medium viscosity for dispensing lens shapes without molds; UV/Visible light cure for curing hundreds of lenses per minute
9623	12,000 (mPas)	Medium viscosity for adding phosphors and dyes; UV-only cure for enhanced heat resistance
9624	120 (mPas)	Low viscosity for thin, uniform coatings; UV-only cure for enhanced heat resistance

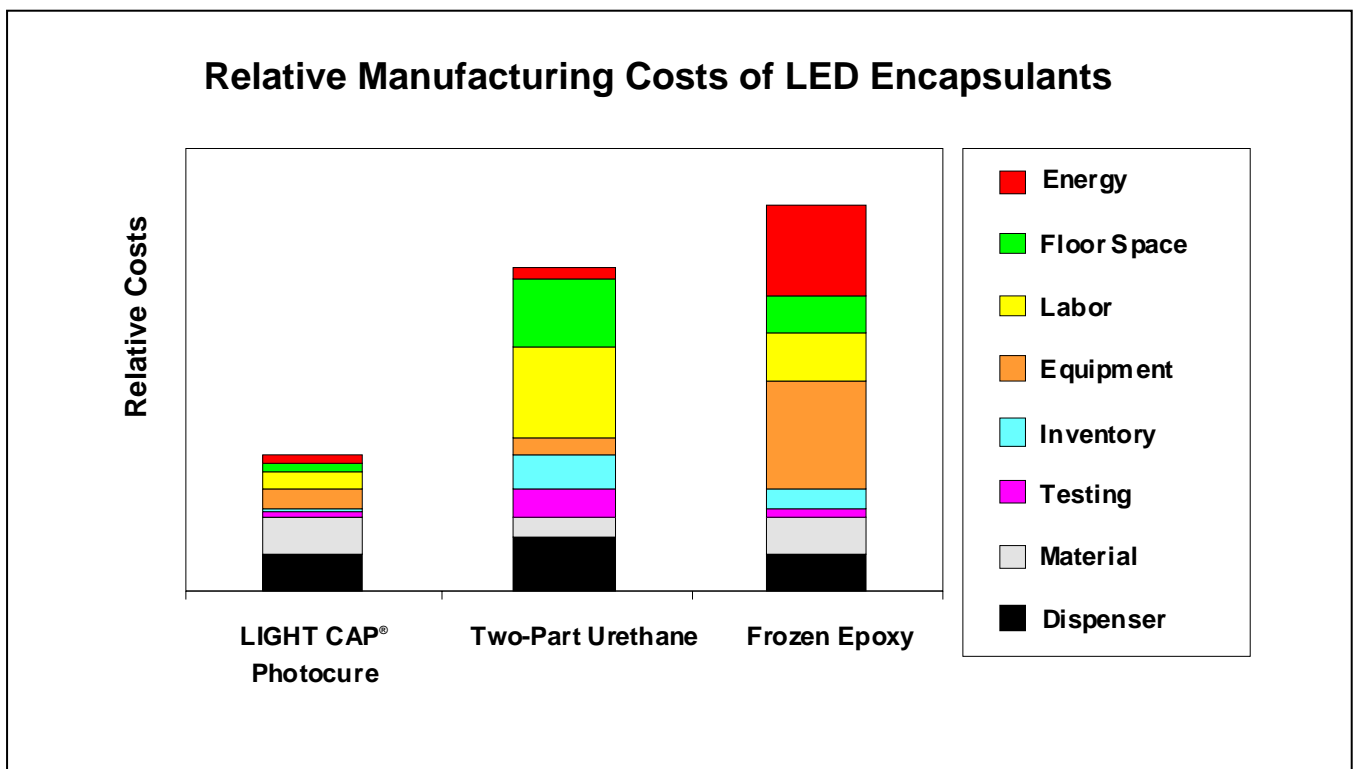


LED Airport Flight Display



Green and Blue LED Pin Lights

## Instant UV Processing Dramatically Lowers Manufacturing Costs



# Ultraviolet Light Curing Guidelines

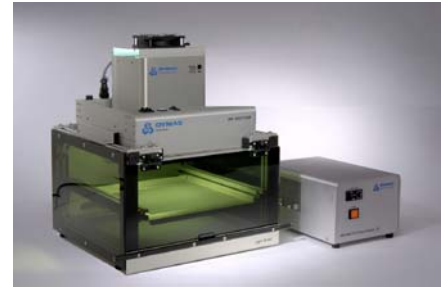
DYMAX Curing System	Curing Footprint (cm)	Cure Speed (seconds)
5000-PC Flood Lamp Curing Station	12,7 x 12,7	2
2000-PC Flood Lamp Curing Station	20 x 20	10
UVC-8 Conveyor	21x21	Belt speed up to 10 m/min



2000-PC Flood Lamp Shown with ZIP™ Shutter and Work Station.  
CE Marked.



UVC-8 Conveyors for High Productivity and Continuous Production  
CE Marked.



5000-PC Flood Lamp Shown with ZIP™ Shutter and Work Station  
CE Marked.

For further assistance with adhesive and equipment selection, contact your DYMAX Applications Engineer.



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