

LIGHTSPAN

Optical Engineering with Advanced Polymers

Products Include:

LS-3238
LS-3246
LS-3249
LS1-3252



Optically clear encapsulation gels and thermosets

Lightspan's family of optically clear encapsulation gels and thermosets offers protection of display backlights and HB LEDs from thermal stress, vibration, dust and moisture. These advanced materials are crystal-clear and available with refractive index ranging up to 1.57 for improved light extraction from LED dies. Service temperatures range up to +200°C (+260°C for 1 - 2 minutes for soldering operations). Visit our website for detailed product data sheets, application notes, and sample requests.

Standard Tests:

Optical absorption
vs. wavelength

Refractive index
(589nm)

Refractive index
vs wavelength

Refractive index
vs temperature
(589nm)



Lightspan materials testing services

Lightspan offers materials testing services to engineering teams working in the photonics and fiber optics arena. We specialize in measurements on optically clear flowable materials such as adhesives, sealants, encapsulants, curing elastomers, epoxies and fluids. We can also make measurements on clear polymer films, coating and optical glasses. Quotations for special test setups available.

Low refractive index optical coatings

Low refractive index optical coating is dissolved in a non-toxic, non-flammable solvent. Coating is conveniently dry to the touch within 10 minutes at room temperature. Once dry, the coating's index of refraction (<1.33) is low enough to aid total internal reflection as a cladding on planar waveguides or bare fiber runs, or as an anti-reflection coating on prisms, faceplates, and lenses. Coating is chemically inert, non-toxic, and resists degradation at processing temperatures up to 300°C (572°F). Its low surface energy allows it to be used as a surface barrier film for masking or repelling migrating adhesives, inks, and oils; it is also useful as a water or dust-repellent coating on optically sensitive surfaces, and as an optically clear mold release agent for precision plastic optics.

