

COOLPOLY® THERMALLY CONDUCTIVE PLASTICS

FOR REFLECTORS

CoolPoly thermally conductive injection molding grade thermoplastics significantly reduce surface and part temperatures in lighting reflectors. Regardless of the source lamp, reflectors experience hot spots due to radiated heat. Conventional plastic reflectors are thermal insulators and cannot spread or dissipate the energy. Thermally conductive plastics act to sink the radiated energy in the mass of the reflector thereby reducing the temperature of the source.



Temperature rise causes light distortion and reduces lamp efficiency and lifetime. Even selecting a high temperature polymer does not eliminate large temperature differentials and thermal expansion in the reflector. LED applications are particularly sensitive, since brightness is a strong function of temperature.

Reflectors molded from thermally conductive plastics can:

- REDUCED SURFACE AND PART TEMPERATURE
- INCREASE DIMENSIONAL STABILITY
- REDUCE CREEP
- IMPROVE LIGHTING QUALITY
- REDUCE LAMP TEMPERATURE
- INCREASE LAMP POWER, EFFICIENCY AND LIFETIME

CoolPoly E4501 thermally conductive plastic is used in transportation, industrial and consumer lighting applications to reduce reflector temperature and increase lamp power.