

## **BRIGHTER, SHARPER, MORE RUGGED - NUSIL'S NEW OPTICALLY CLEAR SILICONE GELS ENABLE NEXT-GENERATION DIGITAL DISPLAYS**

In response to market demands for ever-smaller, ever-higher-definition LCD displays that can withstand an increasingly broad range of environments and conditions, [Polymer Systems Technology Ltd](#) has added two new Optically Clear Silicone Gels, LS1-3443 and Gel 8136, to their full line of silicones for solid state lighting. The newest gels offer greater light output and optical clarity while also improving both impact- and heat-resistance. This enables LCD screen manufacturers to create next-generation displays for smart phones and stadium screens and everything in between that are sharper, brighter and more rugged.

Manufacturers face a number of challenges when creating LCD displays that can be viewed in a wide range of light conditions, or when developing smaller, thinner screens to meet the need for wearable or more portable personal electronics. For example, bright sunlight makes screen viewing particularly difficult as it can create display washout, but increasing display brightness to address this problem drains battery power and generates unwanted heat. And as displays get thinner, there is a higher risk of breakage and lower device durability.

PST helps manufacturers address these challenges by offering Optically Clear Silicone Gels with a range of reflective index (RI) values from 1.38 to 1.54. With a choice of RI values, engineers can match the optical index of their screen's cover glass with the silicone gel that backs it to eliminate display washout in bright light without the need to increase LED output. The gels also provide soft and low modulus to absorb stress, reduce impact and improve ruggedness in newer, thinner displays.

PST's newest gels, [LS1-3443](#) and [Gel-8136](#), have been specifically optimized for harsh environments, allowing manufacturers to increase light output while minimizing power consumption and lowering the risk of product yellowing over time.

"[LS1-3443](#) and [Gel-8136](#) were developed because clients came to us looking for gel solutions that didn't currently exist," said [Derek Williams-Wynn](#) Director of PST. "When manufacturers are looking to develop truly breakthrough products, we have the track record, the highly specialized resources, and the willingness to help them do just that."

For more information about PST's total solutions for LCD screens, please contact us at +44 (0)1494 446610 or visit [www.silicone-polymers.co.uk](http://www.silicone-polymers.co.uk)

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### **About Polymer Systems Technology Ltd**

[Polymer Systems Technology](#), the UK leader in medical and space-grade silicones, brings more than **two** decades of success in developing products for the most demanding applications, from deep inside the human body to the harsh conditions of outer space.