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**PORON®** Urethane Foams

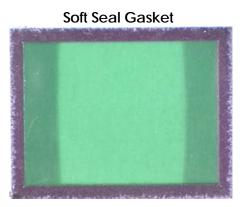
**Applications Note** 

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## PORON<sup>®</sup> Soft Seal Urethane Foams Offer Dust Sealing Solutions In Handheld Electronics Applications

Design engineers are requiring thinner, lighter, softer, and more compressible foam materials to solve sealing and cushioning challenges. These materials must be able to withstand the effects of compression, manage damaging impact energy to the sensitive components, and be able to seal out dust and particulate matter from high resolution liquid crystal displays (LCDs) and other user interfaces.

As handheld electronics such as cell phones integrate media players, high-resolution imaging and video, Internet browsers, document viewing, and more, the LCD displays have become increasingly crisp and colorful, with outstanding resolution. As a result, LCD panel gaskets must be able to block out dirt and particulate over long-term use, keeping displays clean and clear.







The photos above are the result of tumbling LCD panel gaskets, made from PORON<sup>®</sup> Soft Seal urethane and a competitor's urethane foam inside a bag filled with cornstarch over a 3-week period of time. Both gaskets are 1mm thick and are pressed in-between two clear plastic surfaces at 30% compression. This test portrays Soft Seal's ability to seal out dust and particulate in a gasket application, compared to a typical competitor's material. The competitor's material shows compromised sealing due to compression set and rapid stress relaxation, which is noted by the "blowouts" of cornstarch into the center of the gasket.

PORON Urethanes Soft Seal materials maintain a clean gasket area under extreme conditions, offering premium sealing for premium applications.

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