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## **TECHNICAL DATA SHEET 663**

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# Sten**SEAL**<sup>™</sup> Liquid Encapsulant ES8001

## DESCRIPTION

Polysciences' *Sten*SEAL<sup>™</sup> Stencil Applied Overmolds are novel, 100% solids, one component, silica filled liquid encapsulants formulated to create a molded package appearance when applied by means of a stencil printer. *Sten*SEAL<sup>™</sup> is designed to work best with packages that have the wires encapsulated with *No*SWEEP<sup>™</sup> Wire Bond Encapsulant or onthe backside of die such as LOC and BOC.

## **PRODUCT BENEFITS**

StenSEAL<sup>™</sup> Stencil Applied Overmolds are expected to offer the following benefits:

- Reliable performance equal to or better than industry standards
- High Productivity
- Low cost of ownership

ES8001 offers the following distinct advantages:

- Rapid cure
- Low warpage and minimal cure stress
- Good adhesion to die, substrates, and most other interfacing materials.

## **UNCURED (WET) PROPERTIES**

Color Black Specific Gravity 2.13g/ml Viscosity @25°C RVDV-II+, Spindle 14 230,000 cps (+25,000 cps) Pot Life @25°C >24 hours Storage Life >12 months @ -40°C

## **PROCESS PARAMETERS**

#### Thawing

- For best dispensing, thaw to 25°C at room temperature and use as soon as thawed.
- Store cartridge in refrigerator of freezer for short delays between print cycles
- Return cartridge to freezer as soon as possible to extend pot life

#### Gel Times

23 minutes @ 90°C

#### **Cure Schedule**

- 90 minutes @ 60°C plus
- 30 minutes @ 90°C plus 60 minutes @ 125°C

## Alternative Cure Schedule

- 90 minutes @ 90°C plus 60 minutes @ 125°C plus
- 60 minutes @ 160°C

## **CURED PROPERTIES**

Hardness 90, Shore D Glass Transition Temperature (Tg) by DMA >170°C Coefficient of Thermal Expansion (CTE) Alpha 1 TBS ppm/°C Extractable lonic Content Na <5ppm K <5ppm Cl <10ppm

### **STORAGE AND HANDLING**

Shipping	Recommended temperature is -40°C
Storage	Store at -40°C for up to 12 months
Safety	Refer to MSDS for details

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