

# Solvent Resistant Silicones for Sensor Applications

Creative Partners in a Material World

NuSil Technology is a cutting-edge manufacturer of silicone materials for industries requiring precise and predictable custom formulations. Our standard solvent resistant materials are cost effective alternatives to custom development. The line of fluorosilicone based silicones is compromised of encapsulants, adhesives, gels, foams and dispersion fluids.

Solvent resistant silicones are historically used for applications that require fuel or hydrocarbon resistance. These are common in the aerospace, aircraft and automotive industries. They are becoming the material of choice due to their ability to maintain thermal stability at temperatures above 200°C and have a low percent swell.

## **Related White Papers**

- Optical Silicones for Use in Harsh Operating Environments
  B. Riegler (2004)
- Solvent Resistance of Silicones used for Electronic Packaging Applications – M. Velderrain (2006)

#### Gels

Product	Mix Ratio	Durometer (00)	Color	Applications	Comments
GEL-3500	1:1	50	Translucent	Osmotic Pressure Sensor Potting	Firm, Wide Operating Temperature Range

#### **Foams**

Product	Mix Ratio	Density	Color	Applications	Comments
CF1-3710-2	1:1	47 lbs/ft <sup>3</sup>	Gray	Vibration dampening	Wide operating temperature range

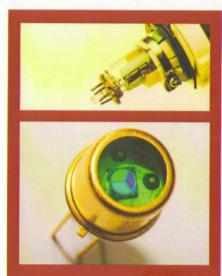
### Dispersions

Product	Mix Ratio	Durometer (A)	Color	Applications	Comments
R-3900	1:1	50	Clear to Translucent	Sensor Head Coating	For thin, transparent elastomeric films

#### **Elastomers**

Product	Mix Ratio	Durometer (A)	Color	Applications	Comments
CF1-3510	10:1	25	Red	Sensor potting	Ideal for potting and encapsulating
CF1-3800	15:1	50	White	Sensor / Heat sink dissipation	Thermally conductive, 1.25 W/mK
CF5-3521-2	1:1	30	Black	Adhesive	Fast cure liquid silicone rubber
LSR-9744-30*	1:1	45	Translucent	Molding sensor body / Components	Extremely tough liquid silicone rubber
LSR1-9696-30*	1 Part	45	Black	Circuit protection	Glob top, excellent adhesion

<sup>\*</sup> Developmental Materials



## **About NuSil Technology**

NuSil Technology, an ISO-9001 certified company since 1994, is an industry leader in developing, manufacturing and testing of low outgassing materials for the electronics industry. NuSil's fluorosilicone based products compliment the low outgassing product line by providing engineers with multiple solutions for harsh environments.

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