

# **ElectroSil™ SIM 76E Silicone Fluid**

## **Product Description**

ElectroSil SIM 76E epoxy and polyether functionalized silicone fluid is an excellent candidate to consider for use in epoxy molding compounds for electronic applications. The silicone functionality in this material provides flexibility and thermal resistance to these compounds, while the polyether functionality improves compatibility of the silicone fluid into various epoxy resins. The epoxy functionality of ElectroSil SIM 76E silicone fluid reacts with the epoxy resins during cure to become bonded to the cured matrix.

## **Key Features and Typical Benefits**

- Modification of epoxy resin
- Improved temperature resistance and weatherability
- Improved impact resistance
- Improved moisture resistance

## **Typical Physical Properties**

Color	Clear to slight yellow liquid
Viscosity at 25 °C, cSt	3,200
Specific Gravity at 25 °C, g/cm <sup>3</sup>	1.0
Epoxy Equivalent Weight	7,200
Surface Tension 25 °C, mN/m	21
Sodium, ppm	< 15
Ionic Chloride, ppm	< 25

Typical physical properties are average data and are not to be used as or to develop specifications.

# **Potential Applications**

Epoxy molding compounds for printed circuit board applications.

## **General Considerations for Use**

Recommended loadings of ElectroSil SIM 76E silicone fluid are between 0.5%-2.5% by weight based on total formulation weight. Experimentation is suggested to identify the optimum loading levels in the epoxy molding compound.

#### **Patent Status**

Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute the permission, inducement or recommendation to practice any invention covered by any patent, without authority from the owner of the patent.

#### **Product Safety, Handling and Storage**

Customers should review the latest Safety Data Sheet (SDS) and label for product safety information, safe handling instructions, personal protective equipment if necessary, emergency service contact information, and any special storage conditions required for safety. Momentive Performance Materials (MPM) maintains an around-the-clock emergency service for its products. SDS are available at www.momentive.com or, upon request, from any MPM representative. For product storage and handling procedures to maintain the product quality within our stated specifications, please review Certificates of Analysis, which are available in the Order Center. Use of other materials in conjunction with MPM products (for example, primers) may require additional precautions. Please review and follow the safety information provided by the manufacturer of such other materials.

#### Limitations

Customers must evaluate Momentive Performance Materials products and make their own determination as to fitness of use in their particular applications.

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