Momentive's dielectric silicone gel materials are extremely soft, lightly cross-linked silicone polymers that provide good stress relief and self-healing properties while maintaining dimensional stability and provide a tacky adhesion. These properties make the dielectric gels excellent candidates to consider for protection of fragile electronic components from moisture and the contaminants. Momentive offers a range of room temperature cure gels including one- and two-part products, and specialized grades that can help provide improved vibration dampening, very fast RT cure and UV activated cure.

Key Features

- Temperature resistance
- Low modulus, good dampening properties
- Low viscosity
- Tacky adhesion at RT
- High dielectric strength (> 18 kV/mm)

Typical Benefits

- Under the hood usage
- Thermal and mechanical stress protection
- Easily flow around components
- Prevent formation of thermally induced voids
- Reliability

Potential Applications

- Sensor potting
- ECU potting
- Power module potting
- Cable joints

Typical Physical Properties

(selected grades only; please contact us for material selection support. All products are two component addition cure (1:1 ratio), except TSE3051 which is one component addition cure.

Product	Cure Time	Work life (at RT)	Penetration (1) (1/10mm)	Viscosity (Pa·s)	Feature
TSE3051	1h at 150°C		85	0.7	1 part, easy handling
TSE3070	0.5h at 70°C	4h	65	0.8	Excellent vibration damping; high elongation

Product	Cure Time	Work life (at RT)	Penetration (1) (1/10mm)	Viscosity (Pa·s)	Feature
TSE3062	0.5h at 70°C	1h	55	1	Excellent temperature stability
Silopren* Gel 6209FC	1h at 100°C	0.5h	85	1	Excellent vibration damping; high elongation
Silopren Gel 7212	1h at 100°C	0.5h	120	1.5	Very soft gel
Silopren Gel 7206	20m at 23°C	10m	70	0.15	Low viscosity, very fast RT cure

(1) Penetration in 1/10 of a mm - measured with quarter cone Typical properties are average data and are not to be used as or to develop specifications. *Silopren is a trademark of Momentive Performance Materials Inc.