

Dielectric Silicone Gel Potting Materials



Momentive Performance Materials provides leading-edge silicone technologies to help meet performance and productivity challenges in a wide range of automotive and electronic applications.

Momentive's dielectric silicone gel materials are extremely soft, lightly cross linked silicone polymers providing good stress relief and self healing properties while maintaining dimensional stability and providing a tacky adhesion. These properties make the dielectric gels excellent candidates to consider for protection of fragile electronic components from moisture and 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 Available

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

Key Typical Benefits

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

Potential Application Examples

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

Gels (selected grades only, please contact us for material selection support)

Product	System ¹	Ratio (w/w)	Cure Time	Work life (min @ RT)	Penetration ² (1/10 mm)	Viscosity (Pa.s)	Feature
TSE3051	AC, 1K	n.a.	1 h @ 150°C	--	85	0.7	1K - Easy handling
UV Gel 100	UV, 2K	10:1	5 min @ RT	> 3 days	50	1	Fast UV cure at RT
TSE3070	AC, 2K	1:1	0.5 h @ 70°C	4 hrs	65	0.8	Excellent vibration damping – high elongation
TSE3062	AC, 2K	1:1	0.5 h @ 70°C	1 hr	55	1	Excellent temperature stability
Silopren* Gel 6209FC	AC, 2K	1:1	1 h @ 100°C	0.5 hr	85	1	Excellent vibration damping
Silopren Gel 7212	AC, 2K	1:1	1 h @ 100°C	0.75 hr	120	1.5	Very soft gel
Silopren Gel 7206	AC, 2K	1:1	20 minutes at 23°C	10 minutes	70	0.15	Low viscosity very fast RT cure

¹ AC = Addition Cure / UV = UV activated Addition Cure

² Penetration in 1/10 of a mm - measured with quarter cone

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