

Thermal Management Silicones



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

Long term, reliable protection of sensitive electronic components is essential to many applications today. Increasingly small systems and rising circuit densities have resulted in higher operating temperatures, and driven demand for high-performance solutions for heat dissipation.

Key Features

- Good mechanical properties
- Property stability under harsh operating conditions
- Low thermal resistance at thin bond lines
- Very fast cure

Typical Benefits

- Reliability
- Compensate CTE mismatch
- Extended component life
- High productivity

Potential Applications

- Power modules
- Sensors
- Board assemblies
- LED assemblies

Thermal Management Materials Typical Properties

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

Product	System (1)	Туре	Cure Time(2)	Thermal Cond. (W/m·K)	Color	Flowability	Feature
TIG210BX	TIG	Grease	n.a.	2.1	Grey	Non-flowable	Low bleed grease
TIG830SP	TIG	Grease	n.a.	4.1	Grey	Non-flowable	Screen printable grease
TIA216G	AC, 2K	Soft rubber	30 min at 70°C	1.6	Grey	Flowable	8 Pa.s; tacky adhesion; UL94-V0, UL RTI 150 °C
TIA222G	AC, 2K	Soft rubber	30 min at 70°C	2.2	Grey	Flowable	20 Pa.s; tacky adhesion; UL94-V0
TIA225GF	AC, 2K	Gap Filler	30 min at 70°C	2.5	Grey	Non-flowable	Soft stress-absorbing rubber; can cure at room temp
TSE3281-G	AC, 1K	Adhesive	30 min at 150°C	1.7	Grey	Flowable	Adhesive
XE13-C1862PT	AC, 1K	Adhesive	30 min at 150°C	2.4	Grey	Flowable	High elongation; pin transferable
XE11-B5320	CC, 1K	Adhesive	TFT 5 min at RT	1.3	White	Non-flowable	Adhesion at RT
TIA0220	CC, 1K	Adhesive	TFT 10 min at RT	2.2	Grey	Semi-flowable	Adhesion at RT; high thermal conductivity
TIA0260	CC, 1K	Adhesive	TFT 10 min at RT	2.6	Grey	Semi-flowable	Adhesion at RT; high thermal conductivity, UL94-V0
TIA350R	AC, 1K	Adhesive	30min at 120°C	3.5	Grey	Semi-flowable	High thermal conductivity

(1) AC = Addition Cure / CC = Condensation Cure / TIG = Thermal Interface Grease (2) TFT = Tack Free Time Typical data are average data and are not to be used as or to develop specifications.



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Patent Status

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Product Safety, Handling and Storage

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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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