

SILICONE ADHESIVE TAD-G-SI-1C

thermally conductive 1 part / addition cure

TAD-G-SI-1C is a liquid addition cure corrosion-free highly thermally conductive 1 part silicone adhesive. It cures at elevated temperature over 100°C to a strong but still elastic rubber and exhibits excellent primerless adhesion to most surfaces. The adhesive features good thermal conductivity. It allows for being operated at temperatures up to 260°C and does not corrode copper or its alloys when fully cured. It is characterised by high resistance to water, acids, bases and most organic solvents and is especially suitable for applications where high thermal conductivity, adhesion, fast curing and controlled, precision application are essential.



Release 10 / 2024

PROPERTIES

- Thermal conductivity: 1.38 W/mK
- High bonding properties
- Heat addition cure
- Self levelling
- Non corrosive
- High operating temperatures up to 260°C
- Extraordinary chemical resistance and longterm stability

AVAILABILITY

- 1 kg jars
- Bulk packaging options on request
- Optional with glass beads

APPLICATION EXAMPLES

- LED systems
- Processor cooling
- Memory chip assembly
- CPU board

Technical Data Sheet

PROPERTY	UNIT	TAD-G-SI-1C
MATERIAL		
Colour		Grey
Physical state		Flowable
Specific Gravity	g/cm ³	2.06
Linear Shrinkage	%	2.0
Viscosity	Pas	43
Hardness	Shore A	67
Tensile Strength	MPa	3.1
Elongation at Break	%	70
Curing Time (@ 100°C / 120°C / 150°C / 175°C) ¹	min	20 – 30 / 15 – 20 / 10 – 15 / 1 – 5
Shelf Life (from Date of Manufacturing, unopened, @ -5 – 15°C)	Months	6
Flammability (Equivalent)	UL 94	HB (1.5 mm)
RoHS Conformity	2015 / 863 / EU	Yes
THERMAL		
Thermal Conductivity	W/mK	1.38
Coefficient of Thermal Expansion Volumetric	x 10 ⁻⁶ /K	562
Coefficient of Thermal Expansion linear	x 10 ⁻⁶ /K	187
Operating Temperature Range	°C	- 50 to + 260
ELECTRICAL		
Dielectric Strength	kV/mm	22.5
Volume Resistivity	Ohm - cm	7.7 x 10 ¹⁵
Surface Resistivity	Ohm - cm	1.3 x 10 ¹⁵
Dielectric Constant		6

¹ Improved adhesion is achieved by post-curing a 120 – 150°C for 1 – 2 hours. All data without warranty and subject to change. All data without warranty and subject to change. Please contact us for further data and information.

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