SILICONE ADHESIVE TAD-I-SI-2C



thermally conductive 2 part / RTV condensation cure

TAD-I-SI-2C is a condensation curing, non-corrosive thermally conductive 2 part silicone adhesive. It vulcanises very rapidly at room temperature (RTV) to a strong but still elastic rubber and exhibits excellent primerless adhesion to most surfaces. The adhesive features good thermal conductivity and a thixotropic rheology that will prevent slumping or flow during the process. It allows for being operated at temperatures up to 200°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 good thermal conductivity, adhesion, fast curing and controlled, precision application are essential.



PROPERTIES

- ☐ Thermal conductivity: 1.55 W/mK
- ☐ High bonding properties
- ☐ Very rapid condensation cure at room temperature (RTV)
- □ 10:1 (A:B Part) volumetric mixing ratio

AVAILABILITY

- ☐ 264 ml cartridges
- Bulk packaging options on request

APPLICATION EXAMPLES

- LED systems
- □ Processor cooling
- Memory chip assembly
- ☐ CPU boards

Property	Unit	TAD-I-SI-2C, Material Part A.	TAD-I-SI-2C, Material Part B
Material		Silicone	Condensation Fluid
Colour		Grey	Black
Specific Gravity	g/cm³	2.31	1.0
Viscosity	Pas	500	64
Hardness	Shore A	65	65
Tensile Strength	MPa	1.93	1.93
Elongation at Break	%	80	80
Young Modulus	MPa	5.64	5.64
Tack Free Time (@ 23°C and 65% RH)	min	12	12
Mechanical Bond	min	50	50
Chemical Bond	h	24	24
Maximum Adhesion	d	5	5
Shelf Life (from Date of Manufacturing, unopened, @ < 30°C)	Months	12	12
RoHS Conformity	2011 / 65 / EU	Yes	Yes
Thermal			
Thermal Conductivity	W/mK	1.55	1.55
Coefficient of Thermal Expansion Volumetric	x 10 ⁻⁶ /K	372	372
Coefficient of Thermal Expansion Linear	x 10 ⁻⁶ /K	124	124
Operating Temperature Range	°C	- 50 to + 200	- 50 to + 200
Electrical			
Dielectric Strength	kV/mm	> 10	> 10
Volume Resistivity	Ohm - cm	2.0×10^{13}	2.0 x 10 ¹³