

SILICONE ADHESIVE TAD-U-SI-1C

thermally conductive 1 part / RTV condensation cure

TAD-U-SI-1C is a condensation curing, non-corrosive highly thermally conductive 1 part silicone adhesive. It vulcanises at room temperature (RTV) to a strong but still elastic rubber and exhibits excellent primerless adhesion to most surfaces. Due to rapid alcoxic curing while being in contact with atmospheric moisture it is solvent free. The adhesive features very high thermal conductivity and a thixotropic rheology that will prevent slumping or flow during the process. It allows for being operated at temperatures up to 230°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 very high thermal conductivity, adhesion, fast curing and controlled, precision application are essential.



PROPERTIES

- ☐ Thermal conductivity: 3.27 W/mK
- ☐ High bonding properties
- ☐ Cures at room temperature (RTV condensation cure)
- ☐ Fast skinning
- ☐ Non corrosive
- ☐ Thixotropic rheology preventing flow during the process
- ☐ High operating temperatures up to 230°C
- ☐ Extraordinary chemical resistance and longterm stability

AVAILABILITY

- ☐ 156 ml cartridges
- ☐ Bulk packaging options on request
- ☐ Optional with glass beads

APPLICATION EXAMPLES

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

PROPERTY	UNIT	TAD-U-SI-1C
MATERIAL		
Colour		Grey
Physical state		Paste
Specific Gravity	g/cm ³	2.95
Extrusion Rate	g/min	104
Hardness	Shore A	84
Tensile Strength	psi	264
Elongation at Break	%	11
Tack Free Time /Skin Formation (@ 23 °C)	min	10
Curing Time (3 mm @ 23 °C, 50 % rel. H.)	h	48
Overlap Shear Strength (Al)	kg/cm ²	13.1
Young Modulus	psi	3,330
Shelf Life (from Date of Manufacturing, unopened, @ <5 °C)	Months	12
Max. Storage Temperature	°C	40
Flammability	UL 94	V0
RoHS Conformity	2015 / 863 / EU	Yes
Thermal		
Thermal Conductivity	W/mK	3.27
Operating Temperature Range	°C	- 65 to + 230
Electrical		
Volume Resistivity	Ohm - cm	1.26 x 10 ¹⁴

All data without warranty and subject to change. Please contact us for further data and information.