

**TIS™580-13 Series** is dealcoholized, one component, room temperature cure thermally conductive silicone adhesive. It possesses good heat conduction and adhesion towards electronic components. It can be cured to a higher hardness elastomer, leads to firmly attached to substrates resulting lower down thermal impedance. Thus, heat transfer among heat source, heat-sink, motherboard, metal casing will become effective. TIS™580-13 Series possesses high thermal conductivity, excellent electrical insulation and is ready-to-use. TIS™580-13 Series has excellent adhesion to copper, aluminium, stainless-steel, etc. As this is a dealcoholized TIM system, it will not corrode, especially, metal surfaces.

**Features**

- » Available in varies thickness
- » Good thermal conductivity: 1.3 W/mK
- » Good maneuverability and good adhesion
- » Low shrinkage
- » Low viscosity, leads to void-free surface
- » Good solvent resistance, water resistance
- » Longer working life
- » Excellent thermal shock resistance

**Product Specification**

**Product Packing:**

100ml / pc, 100pc / box;  
 300ml / pc, 24pc / box

**Product Storage and transportation:**

1. Store in cool, dry place.  
 Shelf life: 6 months (25°C)
2. This product is non-hazardous,  
 refers to local general chemical transportation regulation

Typical Properties of TIS™580-13 Series		
Color	Black paste	Visual
Viscosity@25°C Brookfield (Uncured)	20K cPs	ASTM D1084
Cure type (one component)	Dealcoholized	*****
Tack-free Time (25°C)	≤ 20 min	*****
Cure Time (25°C)	3~7 Days	*****
Gravity (25°C)	1.4 g/cm <sup>3</sup>	ASTM D297
Hardness @25°C	25 Shore A	ASTM D2240
Elongation	≥ 150 psi	ASTM D412
Lap Shear Strength	≥ 2.0 MPa	ASTM D1876
Peel Strength	>3.5 N/mm	ASTM D1876
Operating temperature	-60°C ~250°C	*****
Dielectric Constant@1MHz	2.9	ASTM D150
Dielectric Strength	10 KV/mm	ASTM D149
Volume Resistivity(ohm-cm @ 25°C)	2.0 X 10 <sup>16</sup> Ohm-meter	ASTM D257
Thermal Conductivity	1.3 W/m-K	ASTM D5470
Flame retardant	UL 94 V-0	E331100

Thermal Conductive Interface Materials  
 Application Technology Download



<http://www.ziitek.com>

**Application**

It is widely used to replace thermal conductive silicone grease (paste) and thermal conductive rubber pad as LED aluminum base plate and radiator, high power electrical module and radiator filling adhesive

Connect and heat dissipation. With this glue can be removed from the traditional connection with cards and screws, the result is more reliable filling heat dissipation, simpler process, more economical cost.

Such as: can be widely used in personal portable computer integrated circuit, microprocessor processor, high power LED, memory module, buffer memory, sealed integrated chip, DC/AC converter, IGBT and other power modules, semiconductors, relays, whole Package for converters, transformers, etc.

Thermally Conductive Materials      Heat Generating Materials      Thermally Conductive Plastics  
 Foaming Silica Gel      Die-Cutting Products

**加拿大 Canada**  
 TEL: +001-604-2998559  
 E-mail: frances@ziitek.com.tw  
[Http://www.thermazig.com](http://www.thermazig.com)

**台湾 Taiwan**  
 TEL: +886-2-22771007  
 E-mail: frances@ziitek.com.tw  
[Http://www.ziitek.com.tw](http://www.ziitek.com.tw)

**东莞 Dongguan**  
 TEL: +86-769-38801208  
 E-mail: frances@ziitek.com.tw  
[Http://www.ziitek.com.cn](http://www.ziitek.com.cn)

**昆山 Kunshan**  
 TEL: +86-512-57816297  
 E-mail: kelvin@ziitek.com  
[Http://www.ziitek.com.cn](http://www.ziitek.com.cn)

**杭州 Hangzhou**  
 TEL: +86-571-63850366  
 E-mail: alex@ziitek.com  
[Http://www.ziitek.com.cn](http://www.ziitek.com.cn)

**长沙 Changsha**  
 TEL: +86-731-86949836  
 E-mail: jor@ziitek.com  
[Http://www.ziitek.com.cn](http://www.ziitek.com.cn)

The information and statements herein are believed to be reliable but are not to be construed as a warranty or representation for which we assume legal responsibility. Users should undertake sufficient verification and testing to determine the suitability for their own particular purpose of any information or products referred to herein.

### Instruction For Use:

1. surface cleaning: clean the surface that need to apply adhesive, such that rust, dust, grease are removed
2. apply adhesive: remove the tip-cap and use the sharp tip to puncture the seal. Apply the adhesive onto the cleaned surface.
3. Curing: skinning will gradually occur sitting in room temperature and thus, all process needs to be finished before skinning occurs. This curing starts from surface to underneath. 2-4mm depth will be cured after 24 hours (room temperature and 55%RH). For those the parts very underneath (that difficult to contact with air) and at low temperature, the fully-cured time will be prolonged.
4. Please do not use, move or repackaging the adhering part tat is not fully cured.

### Precautions:

1. Cap the tip after used such that it is sealed good and then store in a proper place. If some skinning is observed, remove it and use as normal. Upon storage, the part at the tip may possess a certain degree of curing, remove it and can be used as normal.
2. There may be some by-products evolved out during curing, which may cause skin and eye irritation. It is highly recommended to use in well air regulated area.
3. Keep out from children.
4. If accidentally contacted with skin, wash it under running water; if contacted to eye, flush with water and get medical assistant immediately.

Thermal Conductive Interface Materials  
Application Technology Download



<http://www.ziitek.com>

#### Thermally Conductive Materials

#### Heat Generating Materials Foaming Silica Gel

#### Thermally Conductive Plastics Die-Cutting Products

##### 加拿大 Canada

TEL: +001-604-2998559  
E-mail: frances@ziitek.com.tw  
[Http://www.thermazig.com](http://www.thermazig.com)

##### 台湾 Taiwan

TEL: +886-2-22771007  
E-mail: frances@ziitek.com.tw  
[Http://www.ziitek.com.tw](http://www.ziitek.com.tw)

##### 东莞 Dongguan

TEL: +86-769-38801208  
E-mail: frances@ziitek.com.cn  
[Http://www.ziitek.com.cn](http://www.ziitek.com.cn)

##### 昆山 Kunshan

TEL: +86-512-57816297  
E-mail: kelvin@ziitek.com  
[Http://www.ziitek.com.cn](http://www.ziitek.com.cn)

##### 杭州 Hangzhou

TEL: +86-571-63850366  
E-mail: alex@ziitek.com  
[Http://www.ziitek.com.cn](http://www.ziitek.com.cn)

##### 长沙 Changsha

TEL: +86-731-86949836  
E-mail: jor@ziitek.com  
[Http://www.ziitek.com.cn](http://www.ziitek.com.cn)