# **Technical Data Sheet**



## **QSil 573 Addition Cure Potting Material**

## PRODUCT DESCRIPTION

QSil 573 is a 100% silicone solids elastomer designed for electronic potting applications. The two-component system offers a hard, thermally conductive, low modulus material that is readily repairable.

### **KEY FEATURES**

- 100% solids
- Excellent thermal conductivity

## **TYPICAL PROPERTIES**

UNCATAYLZED			
PROPERTY	QSil 573 A	QSil 573 B	
Appearance	White	Gray	
Viscosity	5,500 cps	5,500 cps	
Specific Gravity	2.14	2.18	

CATALYZED		
MIX RATIO 1:1		
Gel time at 25°C *	155 minutes	

<sup>\*</sup> Gel time is defined as the time required for the material to become a solid or semi-solid.

CURED PROPERTIES		
15 minutes at 150°C		
PROPERTY	RESULT	
Durometer, Shore A	55	
Tensile	160 psi	
Elongation	40%	

ELECTRICAL PROPERTIES		
PROPERTY	RESULT	
Dissipation factor	0.005	
Dielectric constant @ 1000Hz	4.92	
Volume resistivity	5.05 X 10 <sup>13</sup> ohm-cm	

UL RATING**		
UL 94 V-0	3.0 mm	
UL 94 V-1	1.5 mm	

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THERMAL PROPERTIES **		
PROPERTY	RESULT	
Thermal conductivity**	~ 0.90 W/m-K	
Useful temperature range	- 55°C – 204°C	

<sup>\*\*</sup> Results based on similar material.

#### MIXING

In order to achieve optimum performance the same lot number of QSil 573 A and QSil 573 B should be used.

QSil 573 A and QSil 573 B should be thoroughly mixed prior to catalyzation.

#### Mixing by hand:

Catalyze QSil 573 A with QSil 573 B at a 1:1 ratio by weight. Use a clean plastic or metal container of approximately 3 times the volume of the material and mix by hand. Accurate weighing of all components, on a suitable scale, is essential for optimal product performance when mixing by hand. Mix until the material is uniform with no visible striations.

### Mixing and dispensing with automatic equipment:

Use a mixing system that will properly mix the QSil 573 A and QSil 573 B at a 1:1 ratio by weight.

#### **DE-AERATION**

Air trapped during mixing should be removed by vacuum at 29 inches of mercury. During the process, the material will expand and intermittent evacuation may be required.

Machine mixed material does not normally need to be de-aired.

#### STORAGE AND SHELF LIFE

If QSil 573 A and QSil 573 B are stored in their original unopened containers, in an environment that does not exceed 38C (100F) then QSi will warranty the material for a period of 12 months from the date of shipment.

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#### **DISCLAIMER**

The technical data listed is provided for reference only and is not intended as product specifications. QSi has the capability to customize products as requested. For sales and technical assistance please contact customer service at (804) 271-9010 or 1-800-852-3147.

Please be sure to visit our website daily for our complete product portfolio, new product introductions and more! www.quantumsilicones.com

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