



# Technical Data Sheet

## QSi 563

Addition Cure Potting Material

### PRODUCT DESCRIPTION

QSi 563 is a 100% silicone solids elastomer designed for electrical 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

UNCATALYZED		
PROPERTY	QSi 563 A	QSi 563 B
Appearance	White	Yellow
Viscosity	4,000 cps	5,200 cps
Specific Gravity	2.07	2.13

CATALYZED	
MIX RATIO 1:1	
Gel time at 25°C *	140 minutes

\* 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	46
Tensile	120 psi
Elongation	55 %

ELECTRICAL PROPERTIES	
PROPERTY	RESULT
Dissipation factor	0.007
Dielectric constant @ 1000Hz	4.57
Volume resistivity	$6.52 \times 10^{13}$ ohm-cm
Dielectric strength	460 V/mil

UL LISTED (FILE NUMBER QMFZ2.E205830)	
UL 94 V-0	3.0 mm



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THERMAL PROPERTIES ***	
PROPERTY	RESULT
Thermal conductivity***	~ 0.88 W/m-K
Useful temperature range	- 55°C – 204°C

\*\*\*Results based on hot wire method.

### MIXING

In order to achieve optimum performance the same lot number of QSi 563 A and QSi 563 B should be used.

QSi 563 A and QSi 563 B should be thoroughly mixed prior to catalyzation.

#### Mixing by hand:

Catalyze QSi 563 A with QSi 563 B at a 1:1 ratio by weight in 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.

#### Mixing and dispensing with automatic equipment:

Use a mixing system that will properly mix the QSi 563 A and QSi 563 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 QSi 563 A and QSi 563 B are stored in their original unopened containers, in an environment that does not exceed 38°C (100°F) 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**.

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