



Technical Data Sheet

QSi 550SB

Quantum Silicones' Self-Priming Silicone Potting Material

Product Description

QSi 550SB is a 100% silicone solids elastomer designed for electronic potting applications. This two component system offers a self-priming, hard, thermally conductive, low modulus material that is readily repairable.

Key Features

- 100% solids – no solvents
- Long pot life
- Low modulus
- Good elongation

Typical Properties

Uncatalyzed Properties	“A” component	“B” component
Viscosity, cps	4,000	4,000
Appearance	Beige	Black
Specific Gravity	1.41	1.41
Mix Ratio	1:1	
Pot Life	>8 Hours	

Catalyzed Properties (cured 7 minutes @ 150C)	
Durometer, shore A	55
Tensile, psi	>500
Elongation, %	>120
Tear, die B, ppi	>20
100% modulus, psi	~ 300

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

* Production material not yet tested, results based on similar material

Thermal conductivity**	
W/mK	0.37

Electrical Properties	
Dissipation Factor	0.003210
Dielectric Constant (1000Hz)	3.12
Volume Resistivity, Ohm-cm	1.47199×10^{15}

** Production material not tested, results based on similar material

Adhesion

For best results the cure time/temperature profile shown below should be followed.

<u>Temperature(C)</u>	<u>Time(minutes)</u>
100	45
125	30
150	15

The table above is only a guide and the required cure time for adhesion will vary for different substrates. 100C for 45 minutes is the minimum cure profile that is required to get cure and adhesion to many substrates. It is recommended that the material be tested on the actual substrates that are to be used.

Mixing

Thoroughly stir both A and B components prior to mixing together.

Mixing by hand

Combine equal parts of A and B component by weight and stir until completely mixed. Use care when mixing to minimize air entrapment.

Mixing and dispensing with automatic equipment

Use properly ratioed equipment for a 1:1 mix ratio. Also use a mixing system that will properly mix A and B components. Once mixed properly the material will have an 30 minute pot life.

Storage and Shelf Life

QSil 550SB should be stored in the original unopened container at 25C (77F). It will remain useful for a period of 12 months if stored under those conditions.

Not for Product Specification

The technical data listed herein is provided as a reference only and **is not** intended as sales specifications. For sales and technical assistance or for product recommendations, please call 1-800-852-3147.

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