



QSil 550LV A/C Addition Cure Potting Material

PRODUCT DESCRIPTION

QSil 550LV A and C 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 no solvents •
- Room temperature cure

TYPICAL PROPERTIES

UNCATALYZED			
PROPERTY	QSil 550LV A	QSil 550LV C	
Appearance	Beige	Black	
Viscosity	1,300 cps	1,300 cps	
Specific Gravity	1.41	1.41	

CATALYZED		
MIX RATIO 1:1		
Gel time at 25°C *	110 minutes	

* Gel time is defined as the time required for the material to become a solid or a semi-solid.

CURED PROPERTIES		
7 minutes @ 150°C		
PROPERTY	RESULT	
Durometer, Shore A	62	
Tensile	450 psi	
Elongation	90 %	
Tear	20 ppi	
Youngs modulus	450 psi	

ELECTRICAL PROPERTIES		
PROPERTY	RESULT	
Dissipation factor	0.001	
Dielectric constant @ 1000Hz	3.12	
Volume resistivity	1.47 X 10 ¹⁵ ohm-cm	



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

THERMAL PROPERTIES		
PROPERTY	RESULT	
Thermal conductivity**	~ 0.37 W/m-K	
Useful temperature range	- 55°C – 204°C	

MIXING

In order to achieve optimum performance the same lot number of QSil 550LV A and QSil 550LV C should be used.

QSil 550LV A and QSil 550LV C should be thoroughly mixed prior to catalyzation.

Mixing by hand:

Catalyze QSil 550LV A with QSil 550LV C at a 1:1 ratio by weight using a clean plastic or metal container of approximately 3 times the volume of the material to be mixed 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 550LV A and QSil 550LV C 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 550LV A and QSil 550LV C 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.

Technical Data Sheet



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! <u>www.quantumsilicones.com</u>

> Quantum Silicones Headquarters 7820 Whitepine Road Richmond, VA 23237

Manufacturing, Research and Development Facility 8021 Reycan Road Richmond, VA 23237

> Phone: 804-271-9010 Fax: 804-271-9055 Toll Free: 800-852-3147