Technical Data Sheet



QSil 556 Addition Cure Potting Material

PRODUCT DESCRIPTION

QSil 556 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
- Long gel time
- Good elongation
- Low modulus

1

TYPICAL PROPERTIES

UNCATALYZED			
PROPERTY	QSil 556A	QSil 556B	
Appearance	Beige	Black	
Viscosity	1,050 cps	2,200 cps	
Specific Gravity	1.31	1.30	

CATALYZED		
MIX RATIO 1:1		
Gel time*	72 minutes	

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

CURED PROPERTIES			
15 minutes at 150C			
PROPERTY	RESULT		
Durometer, Shore A	50		
Tensile	250 psi		
Elongation	90%		
Useful temperature range	-55 – 204C		

ELECTRICAL PROPERTIES		
PROPERTY	RESULT	
Dissipation factor	0.002	
Dielectric constant @ 1000Hz	3.36	
Volume resistivity	1.87 X 10 ¹⁵ ohm-cm	

UL RATING File QMFZ2.E20583		
UL 94 V-0		3.0 mm

REV-1

Technical Data Sheet



THERMAL PROPERTIES **		
PROPERTY	RESULT	
Thermal conductivity**	~ 0.37 W/m-K	

^{**} Results based on similar material.

MIXING

In order to achieve optimum performance the same lot number of QSil 556A and QSil 556B should be used.

QSil 556A and QSil 556B should be thoroughly mixed prior to catalyzation.

Mixing by hand:

Catalyze QSil 556A with QSil 556B at a 1:1 ratio by weight using 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.

Mixing and dispensing with automatic equipment:

Use a mixing system that will properly mix the QSil 556A and QSil 556B 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 556A and QSil 556B 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.

2 REV-1

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! www.quantumsilicones.com

> **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

3 REV-1