

Technical Data Sheet

8021 Reycan Road Richmond, VA 23237 Phone: 804-271-9010 FAX: 804-271-9055 Toll free: 800-852-3147

QSil 555

55 Shore A Durometer Silicone Potting Material

PRODUCT DESCRIPTION

QSil 555 is a 100% silicone semi-thixotropic compound designed for potting and encapsulation applications.

KEY FEATURES

- 100% solids no solvents
- Long pot life
- Semi-thixotropic
- Must be heat cured

TYPICAL PROPERTIES

UNCATALYZED			
PROPERTY	QSil 555A	QSil 555B	
Appearance	White	Clear	
Viscosity	80,000 cps	3,000 cps	
Specific Gravity	1.48	0.97	

CATALYZED		
MIX RATIO 10:1		
Gel time*	> 72 hours	

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

HEAT CURED PROPERTIES			
17 minutes at 150C			
PROPERTY	RESULT		
Durometer, Shore A	50		
Tensile	450 psi		
Elongation	100%		
Useful temperature range	-55 – 204C		

ELECTRICAL PROPERTIES		
PROPERTY	RESULT	
Dielectric constant @ 1000 Hz	3.27	
Dissipation Factor	0.009	
Volume resistivity	5.51 X 10 ¹⁵ Ohm-cm	



Technical Data Sheet

8021 Reycan Road Richmond, VA 23237 Phone: 804-271-9010 FAX: 804-271-9055 Toll free: 800-852-3147

MIXING

In order to achieve optimum performance the same lot number of QSil 555A and QSil 555B should be used.

QSil 555A and QSil 555B should be thoroughly mixed prior to catalyzation.

Mixing by hand

Catalyze QSil 555A with QSil 555B at a 10:1 ratio by weight using a clean plastic or metal container of approximately 3 times the volume of the material and mix by hand. When hand mixing; accurate weighing of components on a suitable scale is essential for optimal product performance.

Mixing and dispensing with automatic equipment

Use a mixing system that will properly mix the QSil 555A and QSil 555B at a 10:1 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 555A and QSil 555B 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.

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.

Visit our website at <u>www.quantumsilicones.com</u>.