



Technical Data Sheet

QSi 555

Addition Cure Potting Material

PRODUCT DESCRIPTION

QSi 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
- Heat cure required

TYPICAL PROPERTIES

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

CATALYZED	
MIX RATIO 10:1	
Gel time at 25°C *	> 72 hours

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

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

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



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CURE PROFILE *	
TEMPERATURE, °C	TIME
150°C	15 minutes
120°C	45 minutes
100°C	60 minutes

*Material will not cure at room temperature and may not reach full physical properties if cured below the minimum recommended cure temperature. These are recommended cure times only with actual cure times and temperatures dependent on the quantity of material being used and the shape of the part being made.

MIXING

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

Mixing by hand:

Catalyze QSi 555 A with QSi 555 B 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 QSi 555 A and QSi 555 B 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 QSi 555 A and QSi 555 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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