

## Technical Data Sheet

---

### QSiil 555 Addition Cure Potting Material

#### PRODUCT DESCRIPTION

QSiil 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	QSiil 555 A	QSiil 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	50, Shore A
Tensile	450 psi
Elongation	100%
Useful Temperature Range	- 55 °C – 204 °C

ELECTRICAL PROPERTIES	
PROPERTY	RESULT
Dissipation Factor	0.009
Dielectric Constant at 1,000 Hz	3.27
Volume Resistivity	5.51 x 10 <sup>15</sup> ohm-cm

## Technical Data Sheet

---

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 QSil 555 A and QSil 555 B should be used.

#### Mixing by hand:

Catalyze QSil 555 A with QSil 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 QSil 555 A and QSil 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

This product is best when used within 24 months from date of manufacture. See product label and/or CoA for specific "Use By Date".

Product should be stored in its original, unopened container in an environment that does not exceed 38 °C (100 °F).

Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable. In this case, the properties required for the intended use should be checked for quality assurance reasons.

## Technical Data Sheet

---

### **DISCLAIMER**

The technical data listed is provided for reference only and is not intended as product specifications. CHT USA's team accepts opportunities to either modify specifications in a current product or custom formulate a new one to meet your requirements. For sales and technical assistance, please contact us 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.silicone-experts.cht.com](http://www.silicone-experts.cht.com)

[www.quantumsilicones.com](http://www.quantumsilicones.com)

**CHT USA - Richmond**, 7820 Whitepine Road, Richmond, VA 23237

Manufacturing and R&D Facility, 8021 Reygan Road, Richmond, VA 23237