Technical Data Sheet

QSil 550LV A/B
Addition Cure Potting Material

PRODUCT DESCRIPTION
QSil 550LV A and B 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
- Long pot life
- Low modulus
- Good elongation
- Heat cure required

TYPICAL PROPERTIES

UNCATALYZED		
PROPERTY	**QSil 550LV A**	**QSil 550LV B**
Appearance	Beige	Black
Viscosity	1,300 cps	1,500 cps
Specific Gravity	1.41	1.41

CATALYZED	
MIX RATIO 1:1	
Gel Time at 25 °C *	> 24 hours

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

HEAT CURED PROPERTIES	
7 minutes at 150 °C	
PROPERTY	**RESULT**
Durometer	58, Shore A
Tensile	430 psi
Elongation	85%
Tear	20 ppi
Youngs Modulus	510 psi

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ELECTRICAL PROPERTIES	
PROPERTY	**RESULT**
Dissipation Factor	0.003
Dielectric Constant at 1,000 Hz	3.12
Volume Resistivity	1.46 x 10^{15} ohm-cm
Dielectric Strength	539 V/mil

CURE PROFILE**	
TEMPERATURE	**TIME**
100 °C	30 minutes
125 °C	15 minutes
150 °C	10 minutes

**Material is not designed to cure at room temperature. Material may not reach full physical properties including adhesion, 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.

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 B should be used.

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

Mixing by hand
Catalyze QSil 550LV A with QSil 550LV B at a 1:1 ratio by weight 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 550LV A and QSil 550LV B 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
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.

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:

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