

## QSiil 550 2 part encapsulation and potting silicone

Description	Property	Test Method	Value
<p>QSiil 500 series are 100% silicone solids elastomer designed for electronic potting and encapsulation applications. The two-component system offers a flame retardant, thermally conductive, low modulus material that is readily repairable.</p> <p><b>Key Features</b></p> <ul style="list-style-type: none"> <li>• 100% solids</li> <li>• Long pot life</li> <li>• Low modulus and good elongation</li> <li>• UL94 V0 listed in file No. E205830</li> </ul> <p><b>Application</b></p> <p>Potting electronics to provide environmental protection e.g. Sterilization units</p> <p><b>Use and Cure Information</b></p> <p>Mixing</p> <p>In order to achieve optimum performance, the same lot number of A and B should be used. The A and B parts should be thoroughly mixed prior to catalyzation.</p> <p>Mixing by hand: Catalyze the A part with the B part at the designated mix 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. Mix until the material is uniform with no visible striations.</p> <p>Mixing and dispensing with automatic equipment: Use a mixing system that will properly mix the A and B parts at the designated ratio by weight.</p> <p>De-aeration</p> <p>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.</p> <p><b>Health &amp; Safety</b></p> <p>Safety Data Sheets available on request.</p> <p><b>Packaging</b></p> <p>CHT Encapsulating and potting compounds are available in a variety packaging including bulk containers. Please contact our sales department for more information.</p> <p>Storage</p> <p>This product is best when used within the "Use by Date". See product label and/or CoA for specific "Use by Date". Product should be stored in its original, unopened container. 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.</p>	<p><b>Uncured Product</b></p> <p>Color A</p> <p>Color B</p> <p>Cure Profile</p> <p>Cure Type</p> <p>Density A</p> <p>Density B</p> <p>Gel Time at 25°C/77°F</p> <p>Mix Ratio By Weight</p> <p>Rheology</p> <p>Self Bonding</p> <p>Viscosity Mixed</p> <p><b>Cured Product</b></p> <p><b>7 minutes at 150°C</b></p> <p>Color</p> <p>Elongation at Break</p> <p>Hardness Shore A</p> <p>Max Working Temp</p> <p>Min Working Temp</p> <p>Tear Resistance (N/mm)</p> <p>Tensile Strength</p> <p>Thermal Conductivity</p> <p>UL 94V-0</p> <p>UL File No.</p> <p><b>Electrical Properties</b></p> <p>Dielectric Constant</p> <p>Dielectric Strength kV/mm</p> <p>Dissipation Factor</p> <p>Volume Resistivity (Ohms cm)</p> <p><b>Storage</b></p> <p>Max Storage Temperature</p> <p>Shelf Life</p>	<p>BS ISO 2781</p> <p>BS ISO 2781</p> <p>Brookfield</p> <p>ISO 37</p> <p>ASTM D 2240-95</p> <p>BS ISO 34-1</p> <p>ISO 37</p> <p>ASTM D-150</p> <p>ASTM D-149</p> <p>ASTM D-150</p> <p>ASTM D-257</p>	<p><b>Beige</b></p> <p><b>Black</b></p> <p><b>7 mins at 150°C</b></p> <p><b>Addition</b></p> <p><b>1.41</b></p> <p><b>1.41</b></p> <p><b>130 min</b></p> <p><b>1:1</b></p> <p><b>Liquid</b></p> <p><b>No</b></p> <p><b>4000 cP</b></p> <p><b>Grey</b></p> <p><b>150 %</b></p> <p><b>55</b></p> <p><b>204 °C / 399 °F</b></p> <p><b>-55 °C / -67 °F</b></p> <p><b>5.73 N/mm / 33 pli</b></p> <p><b>3.52 N/mm<sup>2</sup> / 510 psi</b></p> <p><b>~0.37 W/mK</b></p> <p><b>Yes</b></p> <p><b>E205830</b></p> <p><b>3.12</b></p> <p><b>20.3 kV/mm / 516 V/mil</b></p> <p><b>0.003</b></p> <p><b>1.47E+15 ohms cm</b></p> <p><b>38 °C / 100 °F</b></p> <p><b>24 mths</b></p>

Revision Date 02 Sep 2021  
 Revision No 2  
 Download Date 16 May 2022