## **TECHNICAL DATA SHEET**



24 mths

## QSil 550 2 part encapsulation and potting silicone

Description	Property	Test Method	Value
<ul> <li>QSil 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.</li> <li>Key Features</li> <li>Long pot life</li> </ul>	Uncured Product Color A Color B Cure Profile Cure Type		Beige Black 7 mins at 150°C Addition
<ul> <li>Low modulus and good elongation</li> </ul>	Density A	BS ISO 2781	1.41
<ul> <li>275 C Max Working Temp, test method AFS1540B</li> <li>UL94 V0 listed in file No. E205830</li> </ul>	Density B	BS ISO 2781	1.41 130 min
Application	Gel Time at 25°C/77°F Mix Ratio By Weight		1:1
QSil 550 is designed for potting electronics to provide environmental protection (e.g. Sterilization units). Suitable for higher working temperatures.	Rheology Self Bonding		Liquid No
Use and Cure Information	Viscosity Mixed	Brookfield	4000 cP
Mixing:	Cured Product		
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.	<b>7 minutes at 150°C</b> Color Elongation at Break	ISO 37	Gray 150 %
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	Hardness Shore A	ASTM D 2240- 95	55
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.	Max Working Temp Min Working Temp Tear Resistance (N/mm)	BS ISO 34-1	275 °C / 527 °F -55 °C / -67 °F 5.73 N/mm / 33 ppi
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.	Tensile Strength Thermal Conductivity	ISO 37	3.52 N/mm2 / 510 psi ~0.37 W/mK
De-aeration:	UL 94V-0		Yes
Air trapped during mixing should be removed by vacuum at 29	UL File No.		E205830
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.	Electrical Properties Dielectric Constant	ASTM D-150	3.12
Health & Safety	Dielectric Strength kV/mm	ASTM D-149	20.3 kV/mm / 516
Safety Data Sheets available on request.	-		V/mil
Packaging	Dissipation Factor	ASTM D-150	0.003
CHT Encapsulating and potting compounds are available in a variety packaging including bulk containers. Please contact our cales department for more information	Volume Resistivity (Ohms cm)	ASTM D-257	1.47E+15 ohms cm
sales department for more information. Storage:	Storage		
This product is best when used within the "Lise by Date" See	Max Storage Temperature		38 °C / 100 °F

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.

Shelf Life

Revision Date	12 Feb 2024
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