

ALPA-GEL M Silicone Gel

Description	Property	Test Method	Value
<p>This is one of a family of soft, adherent, silicone elastomeric gels designed for the encapsulation and protection of electronic components. It is a low viscosity, 2-component system that is readily mixed in a 1:1 ratio. It is used to provide protection from vibration, thermal or mechanical shock and protection from water and many environmental contaminants. It has excellent dielectric properties.</p> <p>Key Features</p> <ul style="list-style-type: none"> • Very low viscosity • Highly transparent • Crosslinking nearly without shrinkage • Crosslinking accelerated through heat <p>Use and Cure Information</p> <p>IMPORTANT:</p> <p>In order to achieve optimum performance, the same lot number of the A and B components should be used. Mixed lots may not obtain the performance criteria listed on the TDS or Certificate of Analysis.</p> <p>The 'A' part of the product contains the platinum catalyst; great care should be taken when using automatic dispensing equipment. Please ensure that it is not contaminated by residual hydride containing rubber (Part B) in the dispensing equipment, as curing will result. If in doubt, it is advised to thoroughly purge the equipment with a suitable hydrocarbon solvent or silicone fluid.</p> <p>Mixing</p> <p>In order to achieve optimum performance, the same lot number of A and B should be used.</p> <p>Both the 'A' and 'B' parts should be well stirred to ensure the material is uniform and any settled fillers have been remixed.</p> <p>Place the required amount of 'A' and 'B' parts by weight at the mix ratio shown opposite, in a clean plastic or metal container of approximately 3 times their volume, and mix until the colour of the mixture is uniform. For best results, we recommend degassing.</p> <p>Degas by intermittent evacuation, the larger volume of the mixing vessel helps prevent overflow during this operation. In the case of automatic dispensing with static mixing head, the two components should be degassed before processing. Recommended vacuum conditions are 30-50 mbar intermittently over 5-10 minutes. Cast the mixture either by gravity or pressure injection.</p> <p>Inhibition of Cure</p> <p>Great care must be taken when handling and mixing all addition cured silicone elastomer systems, ensuring that all the mixing tools (vessels and spatulas) are clean and constructed in materials which do not interfere with the curing mechanism. The cure of the rubber can be inhibited by the presence of compounds of nitrogen, sulphur, phosphorus and arsenic; organotin catalysts and PVC stabilizers; epoxy resin catalysts and even contact with materials containing certain of these substances e.g. moulding clays, sulphur vulcanised rubbers, condensation cure silicone rubbers, onion and garlic.</p> <p>Curing Conditions</p> <p>The data offers a guide to the rate of cure at various temperatures, mixing of the components at temperatures between 15 and 25°C is recommended to ensure adequate pot life for degassing and handling. The pot life can be extended to several hours by chilling the components before mixing.</p> <p>It is important to check the compatibility in preliminary tests if unknown substrates are used.</p> <p>Health & Safety</p> <p>Safety Data Sheets available on request.</p> <p>Packaging</p> <p>CHT Gels are available in a variety of packaging including bulk containers. Please contact our sales department for more information.</p>	<p>Uncured Product</p> <p>Appearance Color A Color B Cure Type De-mould Time / Full Cure at 23°C/73°F: hrs Density A Density B Mix Ratio By Weight Pot Life mins at 23°C/73°F Rheology Viscosity A Viscosity B Viscosity Mixed</p>		<p>Transparent Clear Blue or clear Addition</p> <p>4 hrs</p> <p>DIN 53 479 0.98 DIN 53 479 0.98</p> <p>1:1 60 mins Gel 180 cP 3500 cP 2000 cP</p>
	<p>Cured Product</p> <p>Density Max Working Temp Min Working Temp Penetration (1/4 Cone, 9.38g, 5 sec) VLRH</p>		<p>DIN 53479 0.98 g/cm3 200 °C / 392 °F -50 °C / -58 °F DIN ISO 2137 57 1/10 mm 12</p>
	<p>Electrical Properties</p> <p>Dielectric Constant Dielectric Strength kV/mm</p>		<p>ASTM D-150 2.8 ASTM D-149 20 kV/mm / 508 V/mil</p>
	<p>Storage</p> <p>Max Storage Temperature Min Storage Temperature Shelf Life</p>		<p>30 °C / 86 °F 5 °C / 41 °F 6 mths</p>
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