

## ALPA-GEL M Silicone Gel

Description	Property	Test Method	Value
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.	<b>Uncured Product</b>		
	Color A		transparent
<b>Key Features</b>	Color B		transparent
	Cure Type		Addition
<b>Use and Cure Information</b>	De-mould Time / Full Cure at 23°C/73°F		4 hrs
	Density A	BS ISO 2781	0.98
<b>IMPORTANT:</b>	Density B	BS ISO 2781	0.98
	Mix Ratio By Weight		1:1
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.	Pot Life mins at 23°C/73°F		60 mins
	Rheology		Gel
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.	Viscosity A	Brookfield	180 cP
	Viscosity B	Brookfield	3500 cP
<b>Mixing</b>	Viscosity Mixed	Brookfield	2000 cP
	<b>Cured Product</b>		
Both the 'A' and 'B' parts should be well stirred to ensure the material is uniform and any settled the fillers have been remixed.	Color		Transparent
	Density	BS ISO 2781	0.98 g/cm3
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.	Max Working Temp		200 °C / 392 °F
	Min Working Temp		-50 °C / -58 °F
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.	VLRH	DIN ISO 48-3:2021-02	12
	<b>Electrical Properties</b>		
<b>Inhibition of Cure</b>	Dielectric Constant	ASTM D-150	2.8
	Dielectric Strength (V/mil)		508 V/mil
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.	<b>Storage</b>		
	Max Storage Temperature		30 °C / 86 °F
<b>Curing Conditions</b>	Min Storage Temperature		5 °C / 41 °F
	Shelf Life		6 mths
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.			
It is important to check the compatibility in preliminary tests if unknown substrates are used.			
<b>Health &amp; Safety</b>			
Safety Data Sheets available on request.			
<b>Packaging</b>			

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