

ALPA-SIL TRANS HM 2 part Silicone Moulding Rubber

Description	Property	Test Method	Value
Uncured Product			
This is a pourable 2-part addition cure silicone elastomer system. After mixing parts 'A' and 'B' in the correct proportions, the system will cure at ambient temperatures within 24 hours, but the rate of cure can be accelerated by heat. The cured rubber exhibits excellent physical and electrical properties.	Appearance		Translucent
	Color A		Translucent
	Cure Type		Addition
	De-mould Time / Full Cure at 23°C/73°F		12 hrs
	Mix Ratio By Weight		10:1
	Pot Life mins at 23°C/73°F		90 mins
	Tack Free Time / Skin Formation at 23°C/73°F		6 hr
	Viscosity A	Brookfield	50000 cP
	Viscosity B	Brookfield	2000 cP
	Viscosity Mixed	Brookfield	30000 cP
	Cured Product		
	Color		Translucent
	Elongation at Break	ISO 37	300 %
	Hardness Shore A	DIN 53 505	37
	Linear Shrinkage (%)		< 0.1 %
	Tear Resistance (N/mm)	BS ISO 34-1	14.5 N/mm / 83 ppi
	Tensile Strength	ISO 37	6 N/mm² / 870 psi
	Storage		
	Max Storage Temperature		30 °C / 86 °F
	Shelf Life		12 mths
Key Features			
<ul style="list-style-type: none"> • High mechanical strength • Easy 10:1 mix ratio • Translucent • Can be pigmented 			
Application			
Silicone Elastomer for mould making and rapid prototyping applications.			
Use and Cure Information			
IMPORTANT:			
The 'A' part of 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 in the dispensing equipment, as curing will result. If in doubt, it's advised to thoroughly purge the equipment with a suitable hydrocarbon solvent or silicone fluid.			
Mixing			
Both the 'A' and 'B' parts should be well stirred to ensure the material is uniform and any settlement of the fillers have been remixed. 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. Degas by intermittent evacuation, the larger volume of the mixing vessel helps prevent overflow during this operation. In 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. In order to achieve optimum performance, the same "A" and "B" side lot number should be used.			
Inhibition of Cure			
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.			
Curing Conditions			
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.			
Health & Safety			
Safety Data Sheets available on request.			
Packaging			
CHT Moulding Rubbers are available in a variety packaging including bulk containers. Please contact our sales department for more information.			
Revision Date	29 Apr 2021		
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Download Date	03 Jul 2024		