

MM730FG

Characterization

This is a pourable 2 component addition cure food grade silicone elastomer system. After mixing components 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 properties and is ideal for use as a moulding rubber.

FDA Compliance

If approved for food use all components present in the fully cured product are listed in CFR 21, 175.300 "Resinous and polymeric coatings" and CFR 21, 177.2600, "Rubber articles intended for repeated use". The fully cured rubber satisfies the requirements of CFR 21, 175.300 und 177.2600, sub paragraphs (e) and (f) for applications involving both aqueous and fatty food.

Technical Data

	MM730FGA Component A	MM730FGB Component B		
Colour	beige	White		
Viscosity	17,000	2,000	mPa·s	Brookfield HBTD
	Mixture			
Cure Type	Addition			
FDA	yes			CFR (21) 177.2600
Mixing ratio	10 : 1		according to weight	
Mixed Viscosity	15,000		mPa·s	Brookfield HBTD
Colour	beige			
Processing time	60		Min	
De-Mould Time	4		h	
Max. Cure at 25°C	24		H	
Max. Cure at 100°C	30		min	
Cured product	Vulcaniste after 7 days at 23°C +/-2°C and 50% +/-5% humidity			
CTE Linear	252		ppm/°C	
CTE Volumetric	756		ppm/°C	
Duro Shore A	30			ASTM D 2240-95
Working Temp.	-50 to 200		°C	AFS-1540B

Tensile	4.4	MPa	ISO 37
Elongation	600	%	ISO 37
Modulus Youngs	0.93	MPa	
Modulus at 100% Strain	0.57	MPa	
Tear	27	kN/m	ISO 34-1
Liear Shrinkage	0.08	%	
SG	1.25		BS ISO 2781

The above given values are product describing data. Please consult the 'delivery specification' for binding product specifications. Further data about product properties, toxicological, ecological data as well as data relevant to safety can be found in the safety data sheet.

Storability / Storage

With a proper storage approx. 12 months if stored properly max. at 30°C and protected from frost in a dry place in closed original containers.

Properties

- FDA CFR 177.2600 compliant for fatty and aqueous foods
- EC 1935/2004 and EC 10/2011 compliant
- very low shrinkage
- high dimensional stability

Application Technique

Processing

Both components A and B should be well stirred to ensure the material is uniform and any settlement of the fillers have been remixed. Place the required amount of components A and B by weight at the mix ratio shown above, 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 dosing 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.

Important:

Component A 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 dosing equipment, as curing will result. If in doubt, it's advised to thoroughly purge the equipment with a suitable hydrocarbon solvent or silicone fluid.

Inhibition of Cure

Great care must be taken when handling and mixing all addition cured silicone elastomer system, 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

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 absolutely important to check the compatibility in preliminary tests if unknown substrates are used.

Safety

Please observe our EC safety data sheets and the safety remarks on our container labels when handling our products. The dangerous goods regulations and the accident prevention regulations of the professional associations must be particularly observed. Keep the EC safety data sheet of the applied product at hand since it provides you with useful instructions for the safe use and disposal of the product as well as for actions to be taken in case of accidents.

We reserve the right to modify the product and technical leaflet.

Our department for applied technique is always at your service for further information and advice.

Our technical advice and recommendations given verbally, in writing or by trials are believed to be correct. They are neither binding with regard to possible rights of third parties nor do they exempt you from your task of examining the suitability of our products for the intended use. We cannot accept any responsibility for application and processing methods which are beyond our control.

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