

Product Name

ELASTOSIL® M4670 A/B Wacker RTV-2 Silicone Rubber

Product Description

Pourable, addition-curing, two component silicone rubber that cures at room temperature.

- High Shore A Hardness (approx 55)
- Fast non-shrink cure which can be accelerated considerably by the application of heat
- Good Flow
- Excellent long-term stability of the mechanical properties of the cured rubber.
- High tear strength
- Outstanding resistance to common casting resins.

Typical Applications

Due to its outstanding resistance to casting resins as well as superior mechanical properties, Elastosil® M4670 is perfectly suitable for all moulds of models with slight undercuts that are to be reproduced in casting resins, and a high inherent rigidity of the mould is required. Due to its high Shore hardness and stability absolute accurate copies can be achieved. The cured moulds are also widely used for casting expanding polyurethane foams and low melting metal alloys.

Physical Properties

Product Data / Uncured

Components			A	B
Colour			Beige	Colourless
Density @ 23°C		[g/cm ³]	1.34	1.03
Viscosity @ 23°C, after stirring	ISO 3219	[mPa s]	130 000	9 000

Product Data / Cured – After 24 hours @ 23°C

Density at 23°C, in water	ISO 2781	[g/cm ³]	1.34
Hardness, Shore A	ISO 867		55
Tensile Strength	ISO 37	[N/mm ²]	5.5
Elongation at Break	ISO 37	[%]	300
Tear Strength	ASTM D 624, B	[N/mm]	> 12
Linear Shrinkage		[%]	<0.1

Handling Properties

Product Data / Catalysed

Mixing Ratio	A : B	[parts by weight]	10 : 1
Colour			Beige
Viscosity @ 23°C	ISO 3219	[mPa s]	80 000

Processing

Important – The platinum catalyst is contained in Component A.

Caution – Only Components A and B with the same batch number may be processed together.

To ensure that both optimum flow and homogeneity of the material, the components must be stirred thoroughly before they are removed or processed in their containers, in order to uniformly disperse any fillers that might have settled during storage.

The table below indicate the pot lives and curing times at various temperatures. The pot life figures indicate the time required for the mix to attain a viscosity of 150 000 mPa s.

Curing times apply to a layer thickness of 1cm.

Temp °C	Pot Lives	Curing Times
-15°C	>2 days	
5°C	6 hr	
15°C	3 hr	
23°C	60 min	24 hr
30°C	30 min	
35°C		10 hr
70°C		30 min
100°C		15 min
150°C		10 min

Storage

Elastosil® M4670 has a shelf life of at least 12 months in the sealed container between 5°C and 30°C. If the material is kept beyond 12 months it is not necessarily unusable, but a test should be performed on the product to check suitability to the application.

Notes

Further information on processing silicone can be found in the Wacker leaflet "Processing RTV-2 Silicone Rubbers". Check with your Barnes Representative for a copy of this leaflet.

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Revision Number

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Disclaimer

The data presented in this leaflet are in accordance with the present state of our knowledge, and does not absolve the user from carefully checking all supplies immediately on receipt. We reserve the right to alter product constants within the scope of technical progress or new developments. The recommendations made in this leaflet should be checked by preliminary trials because of conditions during processing over which we have no control, especially where other companies' raw materials are also being used. Recommendations for use do not constitute a warranty, either expressed or implied, of the fitness or suitability of the product for a particular purpose.