

# ELASTOSIL® M4642 A/B

## WACKER RTV-2 SILICONE RUBBER

### PRODUCT DESCRIPTION

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

- Very Good Flow
- Medium Shore A Hardness (approx 37)
- Fast non-shrink cure which can be accelerated considerably by the application of heat
- Excellent long-term stability of the mechanical properties of the cured rubber.
- High tear strength
- Outstanding resistance to casting resins.

### APPLICATIONS

Due to its outstanding resistance to casting resins as well as superior mechanical properties, ELASTOSIL® M4642 is perfectly suitable for all moulds of models with undercuts that are to be reproduced in casting resins, and a certain inherent rigidity of the mould is required.

#### Product Data / Uncured

Components			A	B
Colour			White	Dark Red
Density @ 23°C		[g/cm <sup>3</sup> ]	1.15	1.00
Viscosity @ 23°C, after stirring	Brookfield	[mPa s]	20 000	700

#### Product Data / Catalysed

Mixing Ratio	A : B	[parts by weight]	10 : 1
Colour			Dark Red
Viscosity @ 23°C	Brookfield	[mPa s]	15 000

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

Density at 23°C, in water	ISO 2781	[g/cm <sup>3</sup> ]	1.14
Hardness, Shore A	ISO 867		37
Tensile Strength	ISO 37	[N/mm <sup>2</sup> ]	7.0
Elongation at Break	ISO 37	[%]	550
Tear Strength	ASTM D 624, B	[N/mm <sup>2</sup> ]	> 30
Linear Shrinkage		[%]	<0.1
Coefficient of Linear Expansion	0-150°C	[m/m K]	2.4 x 10(-4)

ELASTOSIL® M4642 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.

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.

Issue: 2

Date: 3<sup>rd</sup> August 2007

The data presented in this bulletin 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.

#### Head Office

6 Homedale Road  
Bankstown NSW 2200  
Australia  
T: (612) 9793 7555  
F: (612) 9793 7091

#### Retail Showrooms

53 King Street  
Newtown NSW 2042  
T: (02) 9557 9056  
F: (02) 9557 9246

40-42 Swan Street  
Richmond VIC 3121  
T: (03) 9428 5511  
F: (03) 9428 5533

[www.barnes.com.au](http://www.barnes.com.au)

## ***Processing***

**Important – The platinum catalyst is contained in Component B.**

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

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 60 000 mPa s.

Curing times apply to a layer thickness of 1 cm.

<b><i>Temp °C</i></b>	<b><i>Pot Lives</i></b>	<b><i>Curing Times</i></b>
-15°C	>2 days	
5°C	6 hr	
15°C	3 hr	
23°C	90 min	12 hr
30°C	40 min	
35°C		3 hr
70°C		20 min
100°C		10 min
150°C		5 min

Available Pack Sizes (M4642 A/B): 550gm, 1.1kg, 5.5kg, 33kg, 220kg

Issue: 2

Date: 3<sup>rd</sup> August 2007

The data presented in this bulletin 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.