

Product Name**ELASTOSIL® M4503**
Wacker RTV-2 Silicone Rubber**Product Description**

Pourable, condensation-curing, two component silicone rubber that cures at room temperature and features:

- Good Flow
- Low Shore A Hardness (approx 25)
- High Tear Strength
- Great extensibility and elasticity
- Excellent long term stability of the mechanical properties of the cured rubber
- High resistance to casting resins, particularly polyester

Typical Applications

Due to the excellent mechanical properties of the cured rubber as well as its high resistance to casting resin, ELASTOSIL® M4503 is especially suitable for reproducing models with pronounced undercuts in casting resins.

Other materials, such as wax and plaster, may be cast without any problems in moulds made from M4503.

Physical Properties**Product Data / Uncured**

Colour			White
Density @ 23°C		[g/cm ³]	1.17
Viscosity @ 23°C, after stirring	Brookfield	[mPa s]	45 000
With 5% wt Catalyst T35			
Viscosity @ 23°C	Brookfield	[mPa s]	40 000

Product Data / Cured – with 5% wt T35, after 7 days @ 23°C / 50% relative humidity

Density at 23°C, in water	ISO 2781	[g/cm ³]	1.16
Hardness, Shore A	ISO 867		25
Tensile Strength	ISO 37	[N/mm ²]	5.0
Elongation at Break	ISO 37	[%]	350
Tear Strength	ASTM D 624, B	[N/mm ²]	> 20
Linear Shrinkage		[%]	0.5
Coefficient of Linear Expansion	0-150°C	[m/m K]	2.0 x 10(-4)

Handling Properties

Processing

With 5% wt Catalyst T35	90 [min] Pot life	15-20 [hr] Curing Time (tack free)
-------------------------	-------------------	---------------------------------------

The pot life figure indicates the time at 23°C / 50% RH required for the catalysed mix to attain a viscosity of 100 000 mPa s and still be just pourable.

Storage

Elastosil® M4503 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.

Issue Date

15th June 2010

Revision Number

3

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.