

Product Name

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

Product Description

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

- Excellent flow
- Fast non-shrink curing at room temperature
- Variable hardness and cure rate, miscible at any ratio
- High elongation, outstanding tensile strength
- Excellent tear strength
- Cured rubber is translucent and colourless
- Unique no lot number binding on the components

Typical Applications

Elastosil® VARIO is unique high performance silicone mould-making compound which can be blended at any ratio for a tailored hardness specific to your application. The reactivity of the mixed rubber is also variable by blending the Vario Catalyst and Catalyst F. VARIO is used for mould making, technical silicone parts, coatings and encapsulation of electrical components.

Physical Properties

Product Data / Uncured

Components			Vario 15 Part A	Vario 40 Part A
Colour			Translucent	Translucent
Density @ 23°C		[g/cm ³]	1.06	1.15
Viscosity @ 23°C, stirred	ISO 3219	[mPa s]	5 000	15 000

Product Data / Catalysed

	A : B	[parts by weight]	Vario 15	Vario 40
Mixing Ratio			10 : 1	10 : 1
Colour			Translucent	Translucent
Viscosity @ 23°C	ISO 3219	[mPa s]	3 000	10 000

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

			Vario 15	Vario 40
Density at 23°C, in water	ISO 2781	[g/cm ³]	1.06	1.15
Hardness, Shore A	ISO 868		15	40
Tensile Strength	ISO 37	[N/mm ²]	6.5	8
Elongation at Break	ISO 37	[%]	900	450
Tear Strength	ASTM D 624, B	[N/mm]	15	15
Linear Shrinkage		[%]	<0.1	<0.1

Processing

Important – The platinum catalyst is contained in Component B.

The figures given in the charts below are indication only and we recommend running preliminary tests to optimize conditions for the particular application

The base components VARIO 15 and VARIO 40 are miscible at any ratio, making it possible to reach any desired Shore A hardness in the range of approx 15 – 40.

Base	Hardness Shore A
Vario 15	15
Vario 15 (90) : Vario 40 (10)	17.5
Vario 15 (80) : Vario 40 (20)	20
Vario 15 (70) : Vario 40 (30)	22.5
Vario 15 (60) : Vario 40 (40)	25
Vario 15 (50) : Vario 40 (50)	27.5
Vario 15 (40) : Vario 40 (60)	30
Vario 15 (30) : Vario 40 (70)	32.5
Vario 15 (20) : Vario 40 (80)	35
Vario 15 (10) : Vario 40 (90)	37.5
Vario 40	40

By blending VARIO Catalyst and VARIO Catalyst F pot lives between 2 and 60 minutes, and curing times between 15 minutes and 6 hours are achievable. Accelerated catalysts may also reduce the life expectancy of the mould.

Catalyst	Part by Weight	Pot Life [min] @ 23°C	Curing Times @ 23°C
Vario	10%	120	6 hr
Vario (70) : Vario F (30)	10%	60	2.5 hr
Vario (50) : Vario F (50)	10%	30	75 min
Vario (30) : Vario F (70)	10%	15	50 min
Vario F (100)	10%	2	15 min

Storage

Elastosil® VARIO has a shelf life of at least 12 months in the sealed container between 5°C and 25°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.

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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.