



# **ELASTOSIL® VARIO**

RTV-2 Silicone Rubber/Modular System

# Characteristics

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

# **Special characteristics**

- Two base components, two catalysts
- · Easy to process because of low viscosity
- Fast and non-shrink cure at room temperature, adjustable over a wide range
- Variable hardness (approx 15 40 Shore A)
- · High elongation, outstanding tensile strength
- Excellent tear strength
- · Cured rubber is translucent and colorless

Can be pigmented with 1 - 4 % ELASTOSIL<sup>®</sup> Pigment Pastes FL

## **Application**

- Encapsulation of electrical and electronic components
- Coatings
- · Manufacture of technical silicone parts
- · Mold making

Product data (uncured)

| Property                   | Test method | Unit    | Value       |             |
|----------------------------|-------------|---------|-------------|-------------|
|                            |             |         | VARIO 15    | VARIO 40    |
| Color                      |             |         | Translucent | Translucent |
| Density at 23 ℃            |             | [g/cm³] | 1.06        | 1.15        |
| Viscosity at 23 ℃, stirred | ISO 3219    | [mPa s] | 5,000       | 15.000      |

Product data (catalyzed with ELASTOSIL® Catalyst VARIO or Catalyst VARIO-F)

| Property                               | Test method      | Unit    | Value    |          |
|--|------------------|---------|----------|----------|
|  |                  |         | VARIO 15 | VARIO 40 |
| Mixing ratio                           |                  | [pbw]   | 10 : 1   | 10 : 1   |
| Viscosity                              | ISO 3219         | [mPa s] | 3,000    | 10,000   |
| Pot life at 23 ℃ (up to 100,000 mPa s) | Catalyst Va rio  |         | 150      |          |
|  | Catalyst Vario-F | [min]   |          | 2        |
| Curing time, tack-free                 | Catalyst Vario   | [h]     |          | 6        |
|  | Catalyst Vario-F | [min]   |          | 15       |

Product data (cured)

| Property                  | Test method  | Unit    | Value    |          |
|---------------------------|--------------|---------|----------|----------|
|                           |              |         | VARIO 15 | VARIO 40 |
| Density at 23 ℃, in water | ISO 2781     | [g/cm³] | 1.06     | 1. 15    |
| Hardness Shore A          | ISO 868      |         | 15       | 40       |
| Tensile strength          | ISO 37       | [N/mm²] | 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    |

Compression moulded 10 min at 100 ℃.

These figures are only intended as a guide and should not be used in preparing specifications.



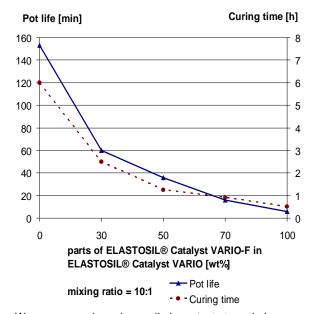


## **Processing**

## Important! ELASTOSIL® Catalyst VARIO and VARIO-F contain the platinum catalyst.

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

By blending catalysts ELASTOSIL® Catalyst VARIO and VARIO-F pot lifes between 2 and 150 min, and curing times between 15 min and 6 hours are achievable. In the following chart pot-lifes and curing times of different mixing ratios are given.



We recommend running preliminary tests to optimize conditions for the particular application. Comprehensive processing instructions are given in our leaflet "Wacker RTV-2 Silicone Rubber - Processing".

## **Pigmentation**

If so desired, 1 - 4 wt % ELASTOSIL<sup>®</sup> Pigment Pastes FL can be added, preferably to the base component.

For more detailes, please refer to our leaflet "ELASTOSIL® Pigment Pastes FL".

## Storage

The components of the modular system ELASTOSIL® VARIO should be stored between 5  $^{\circ}$ C and 25  $^{\circ}$ C in the tightly closed original container. The 'Best use before end' date of each batch appears on the product label.

Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons.

## Safety information

Components of the addition-curing system ELASTOSIL® VARIO contain only constituents that over many years have proved to be neither toxic nor aggressive. Special handling precautions are therefore not required, i.e., only the general industrial hygiene regulations apply.

Detailed safety information is contained in each Material Safety Data Sheet, which can be obtained from our sales offices.

## **Additional information**

Please visit our website www.wacker.com

The data presented in this leaflet are in accordance with the present state of our knowledge, but do 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. The recommendations do not absolve the user from the obligation of investigating the possibility of infringement of third parties' rights and, if necessary, clarifying the position. Recommendations for use do not constitute a warranty, either express or implied, of the fitness or suitability of the products for a particular purpose.

The management system has been certified according to DIN EN ISO 9001 and DIN EN ISO 14001

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Version 3.00 from 01-08-12 replaces Version 2.00 from 20-06-12 For technical, quality, or product safety questions, please contact

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