

ELASTOSIL® R 401/50

HIGH CONSISTENCY SILICONE RUBBER

Product description

Vulcanizates made from this compound exhibit a unique combination of characteristics. They are noted for their good flexibility, high transparency, and mechanical properties. The compounds are easily pigmented with ELASTOSIL® PT Pigment Pastes and have good processing characteristics.

Application

ELASTOSIL® R 401/50 has many different uses, being suitable for molded articles and extrusions such as seals, sheet, tubing and profiles.

Postcured parts can be used for food contact applications and are suitable for use under the Recommendation "XV. Silicones" of the BfR and FDA § 177.2600 under observance of any given limitations on extractable and volatile substances.

Storage

The 'Best use before end' date of each batch is shown 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 notes

Comprehensive instructions are given in the corresponding Material Safety Data Sheets. They are available on request from WACKER subsidiaries or may be printed via WACKER web site <http://www.wacker.com>.

Product data

Typical general characteristics	Inspection Method	Value
Appearance		transparent
Density at 20 °C	ISO 1183-1 A	approx. 1,15 g/cm ³
Curing agent E		
Hardness Shore A	DIN 53505	52
Tensile strength	DIN 53504 S 1	11,00 N/mm ²
Elongation at break	DIN 53504 S 1	520 %
Tear strength	ASTM D 624 B	25 N/mm
Rebound resilience	DIN 53512	56 %
Compression set	DIN ISO 815-B (22 h / 175 °C)	34 %
Curing agent C1		
Hardness Shore A	DIN 53505	52
Tensile strength	DIN 53504 S 1	12,00 N/mm ²
Elongation at break	DIN 53504 S 1	637 %
Tear strength	ASTM D 624 B	29 N/mm
Rebound resilience	DIN 53512	53 %
Compression set	DIN ISO 815-B (22 h / 175 °C)	17 %

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

Cure conditions

Curing agent		[%]	Cure	Post-cure
E	50 % paste of bis-(2,4-dichlorobenzoyl)-peroxide in silicone fluid	1.5	10 min / 135 °C	4 h / 200 °C
C1	Dicumyl peroxide (98 %)	0.7	15 min / 165 °C	4 h / 200 °C
C6	45 % paste of 2,5-bis-(t-butylperoxy)-2,5-dimethyl-hexane in silicone rubber	1.2	15 min / 165 °C	4 h / 200 °C

Curing Agent C6 yields similar values to those obtained with C1.

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

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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For technical, quality, or product safety questions, please contact:

Wacker Chemie AG
Hanns-Seidel-Platz 4
81737 München, Germany
info.silicones@wacker.com

www.wacker.com