ELASTOSIL® R 865/50 S

ELASTOSIL®

High Consistency Silicone Rubber (HCR)

ELASTOSIL® R 865/50 S offers numerous functional advantages. The material ensures superior rebound resiliencey and a minimal compression set.

The compounds are easily pigmentable with ELASTOSIL® PT Pigment Pastes and have good processing characteristics. The various grades (ELASTOSIL® R 865/40 - ELASTOSIL® R 865/70) can be blended in any proportion to achieve intermediate hardness.

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.

Properties

Specific features

- Food-contact
- High rebound resilience
- Ultra-low compression set

Technical data

Properties Cured

Cure conditions: 0.5 % ELASTOSIL® AUX Crosslinker C6 (45 % paste of 2,5-bis-(t-butylperoxy)-2,5-dimethyl hexane in silicone rubber), 15 min / 165 °C in press, post-cured 4 h / 200 °C

Property	Condition	Curing Agent C6	Method
Appearance	-	translucent	-
Hardness Shore A	-	48	DIN ISO 48-4
Density	-	1.12 g/cm^3	DIN EN ISO 1183-1 A
Tensile strength	-	8.0 N/mm^2	ISO 37 type 1
Elongation at break	-	370 %	ISO 37 type 1
Tear strength	-	14 N/mm	ASTM D 624 B
Compression Set[1]	22 h | 175 °C	7 %	DIN ISO 815-1 type B method A
Rebound resilience	-	69 %	ISO 4662

[1]post-cured 4 h / 200 °C

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

All the information provided is in accordance with the present state of our knowledge. Nonetheless, we disclaim any warranty or liability whatsoever and reserve the right, at any time, to effect technical alterations. The information provided, as well as the product's fitness for an intended application, should be checked by the buyer in preliminary trials. Contractual terms and conditions always take precedence. This disclaimer of warranty and liability also applies particularly in foreign countries with respect to third parties' rights.

Applications

- Calendered Sheets
- Dairy & Food Applications
- General Automotive Parts
- Molded Parts

Application details

ELASTOSIL® R 865/50 S is especially designed for peroxide curing applications as

- extrusion
- calendering
- molding

Processing

We recommend to use following amount of peroxide:

ELASTOSIL® AUX Crosslinker E: 1,5 % 50% paste of bis-(2,4-dichorobenzoyl)-peroxide in silicone fluid

ELASTOSIL® AUX Crosslinker C6: 0,5 % 45% paste of 2,5-bis-(t-butylperoxy)-2,5-dimethyl-hexane in silicone rubber

ELASTOSIL® AUX Crosslinker C1: 0,3 % (Dicumyl peroxide 98%)

Preliminary tests lead to optimized results.

For detailed information please refer to the latest edition of our brochure "SOLID AND LIQUID SILICONE RUBBER - MATERIAL AND PROCESSING GUIDELINES".

Packaging and storage

Packaging

This product is available in 20 kg and 540 kg cardboard packaging.

Special delivery forms are possible but depend on several technical and commercial aspects. Please contact your local sales manager in such cases.

Storage

Please store the cardboard boxes in a dry and cool place. Already opened boxes should be closed again to avoid any contamination.

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.

QR Code ELASTOSIL® R 865/50 S

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

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