

# ELASTOSIL<sup>®</sup> R 781/80 OH



## High Consistency Silicone Rubber (HCR)

ELASTOSIL<sup>®</sup> R 781/80 is a magnetite filled high consistency rubber for molding and extrusion applications. It can be processed directly or be blended with other ELASTOSIL<sup>®</sup> R or R plus grades.

## Properties

This product can be used within a temperature range of - 55 °C to + 210 °C. The addition of heat stabilizers at service temperatures of more than 180 °C is recommended. Further information to improve the heat stability by use of specific ELASTOSIL<sup>®</sup> AUX Heat Stabilizers can be obtained from the Technical Information Sheet "ELASTOSIL<sup>®</sup> AUX Stabilizers H" or from the latest brochures.

- rubber base containing 70% magnetite
- crosslinkable using standard peroxides or the ELASTOSIL<sup>®</sup> 4K system
- can be processed directly or blended with all ELASTOSIL<sup>®</sup> and R plus grades

## Specific features

- Magnetizable

## Technical data

### Properties Cured

Cure conditions (post-cured 4 h / 200 °C):

1.5 % ELASTOSIL® AUX Crosslinker E (50% paste of bis-(2,4-dichlorobenzoyl)-peroxide in silicone fluid); 10 min / 135°C in press  
0.7 % ELASTOSIL® AUX Crosslinker C1 (Dicumylperoxide), 15 min / 165 °C in press

Property	Condition	Curing Agent E	Curing Agent C1	Method
Appearance and color	-	black	black	-
Density	-	2.30 g/cm <sup>3</sup>	2.30 g/cm <sup>3</sup>	DIN EN ISO 1183-1 A
Hardness Shore A	-	79	80	ISO 7619-1
Tensile strength	-	3.3 N/mm <sup>2</sup>	5.3 N/mm <sup>2</sup>	ISO 37 type 1
Elongation at break	-	50 %	100 %	ISO 37 type 1
Rebound resilience	-	50 %	52 %	ISO 4662
Tear strength	-	18.0 N/mm	15.2 N/mm	ASTM D 624 B

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.

## Application details

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.

## Processing

ELASTOSIL® R 781/80 may be vulcanized using ELASTOSIL® AUX CURING AGENT C1, C6. Due to the high content of filler it is recommended to reduce the content of peroxides to 50 % of the normally applied amounts when ELASTOSIL® R 781/80 is processed directly.

As an alternative crosslinking system the ELASTOSIL® 4K system may be applied. For further information on this topic please contact your responsible sales or technical manager.

The raw rubber requires the addition of peroxides for vulcanization at elevated temperatures. A homogeneous incorporation is a must, but please avoid temperatures >30°C along the incorporation process in order to maintain best processing behavior. Pot life is depending on the used peroxide and storage condition.

For detailed information refer to our latest 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 781/80 OH



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

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