

# ELASTOSIL<sup>®</sup> R 780/80 OH



## High Consistency Silicone Rubber (HCR)

ELASTOSIL<sup>®</sup> R 780/80 OH silicone rubber contains large amounts of inert fillers (mainly ground quartz) and has been developed specifically for blending with low durometer bases.

## 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.

## 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	-	beige	beige	-
Density	-	1.74 g/cm <sup>3</sup>	1.74 g/cm <sup>3</sup>	DIN EN ISO 1183-1 A
Hardness Shore A	-	80	85	ISO 7619-1
Tensile strength	-	6.0 N/mm <sup>2</sup>	7.0 N/mm <sup>2</sup>	ISO 37 type 1
Elongation at break	-	70 %	60 %	ISO 37 type 1
Compression Set	22 h   175 °C	15 %	11 %	DIN ISO 815-1 type B method A
Rebound resilience	-	59 %	57 %	ISO 4662
Tear strength	-	8 N/mm	7 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

ELASTOSIL® R 780/80 OH is not only suitable for blending with standard grades, but can also be processed by compression, transfer or injection moulding.

ELASTOSIL® R 780/80 OH silicone rubber allows large amounts of inert fillers to be readily incorporated into silicone rubber bases. This avoids the risk of silicosis when inert fillers are compounded on a roll mill.

The main advantages of blends containing inert fillers are, for example, their improved oil resistance and grindability. It can be used to rapidly adjust the specific gravity of formulations to meet specifications. Blends with low durometer bases result in compounds of medium Shore A hardness with high filler content and good mechanical properties.

## Processing

ELASTOSIL® R 780/80 OH is not only suitable for blending with standard grades, but can also be processed by compression, transfer or injection moulding.

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 780/80 OH



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

**Wacker Chemie AG**, Hanns-Seidel-Platz 4, 81737 Munich, Germany  
[info@wacker.com](mailto:info@wacker.com), [www.wacker.com](http://www.wacker.com)

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