ELASTOSIL® R plus 4020/40 MH

ELASTOSIL®

High Consistency Silicone Rubber (HCR)

ELASTOSIL® R plus 4020/40 MH is an addition-cure, one-component high consistency silicone rubber for the manufacture of molded articles. Cured articles are of high transparency and exhibit excellent tear resistance.

Properties

ELASTOSIL® R plus 4020/40 MH is a fast curing silicone rubber exhibiting excellent tear resistance. Thanks to addition cure, the vulcanization reaction is significantly faster compared to peroxide curing materials. No peroxide decomposition products are formed during vulcanization.
At service temperatures above approx. 180 °C the addition of heat stabilizers is recommended. Further information about an improvement of the heat stability by use of specific ELASTOSIL® AUX Heat Stabilizers can be obtained from the Technical Information Sheet "ELASTOSIL® AUX Stabilizers H" or the latest edition of our brochures.

Specific features

- Addition Curing
- Food-contact
- High tear-resistant
- One-component

Technical data

Properties Cured

Cure conditions: 15 min / 165 °C in press, post-cured 4 h / 200 °C

Property	Condition	Value	Method
Appearance	-	transparent	-
Hardness Shore A	-	39	DIN ISO 48-4
Density	-	1.14 g/cm^3	DIN EN ISO 1183-1 A
Tensile strength	-	10.9 N/mm^2	ISO 37 type 1
Elongation at break	-	1000 %	ISO 37 type 1
Tear strength	-	46 N/mm	ASTM D 624 B
Compression Set[1]	22 h | 175 °C	29 %	DIN ISO 815-1 type B method A
Rebound resilience	-	48 %	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

- Baby Care
- Dairy & Food Applications
- Molded Parts

Application details

ELASTOSIL® R plus 4020/40 MH is suited for the manufacture of molded articles.
Properly cured and post-cured vulcanizates of ELASTOSIL® R plus 4020/40 MH can be used for food contact applications and are suitable for use under the Recommendation "XV. Silicones" of the BfR and FDA 21 CFR §177.2600 "Rubber Articles Intended for Repeated Use" considering any given limitations on extractable and volatile substances.

Processing

ELASTOSIL® R plus 4020 series is particularly suited for press-curing or processing on a silicone rubber injection molding machine.
CAUTION! Danger of deactivation!
The platinum catalyst can be deactivated by e.g. amines or sulfur compounds.
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. Once opened, cardboard boxes should always be resealed after use to prevent the platinum catalyst from being poisoned by amines, sulphur or phosphorus compounds. 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 plus 4020/40 MH

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

Wacker Chemie AG, Hanns-Seidel-Platz 4, 81737 Munich, Germany
productinformation@wacker.com, www.wacker.com

The data presented in this medium 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 medium 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 information provided by us does 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 product for a particular purpose.