

ELASTOSIL[®] R 701/80 S



High Consistency Silicone Rubber (HCR)

ELASTOSIL[®] R 701/80 S is a HCR grade for extrusion and molding applications.

Properties

- Good heat- and reversion-stabilised
- Excellent resistance to mineral oil
- Non-post-cure properties:

The differences in the mechanical properties of post-cured and non-post-cured vulcanizates are only very slight

- When Curing Agent E is used, blooming of the decomposition products will not occur
- Good elasticity and low compression set, even when Curing Agent E is used

Specific features

- Oil resistant
- Ultra-low compression set

Technical data

Properties Cured

Cure conditions:

0.7 % ELASTOSIL® AUX Crosslinker C1 (Dicumylperoxide); 15 min / 165 °C in press, post-cured 4 h / 200 °C

| Property | Condition | Value | Method |
|---------------------|---------------|------------------------|-------------------------------|
| Appearance | - | beige | - |
| Hardness Shore A | - | 80 | DIN ISO 48-4 |
| Density | - | 1.39 g/cm ³ | DIN EN ISO 1183-1 A |
| Tensile strength | - | 7.6 N/mm ² | ISO 37 type 1 |
| Elongation at break | - | 200 % | ISO 37 type 1 |
| Tear strength | - | 16 N/mm | ASTM D 624 B |
| Compression Set | 22 h 175 °C | 17 % | DIN ISO 815-1 type B method A |
| Rebound resilience | - | 59 % | ISO 4662 |

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

Oil resistance

Cure conditions: 0.7 % ELASTOSIL® AUX Crosslinker C1 (Dicumylperoxide), 15 min / 165 °C in press, post-cured 4 h / 200 °C

| Property | 70 h / 150 °C IRM 901 | 70 h / 150 °C IRM 903 | Method |
|---------------------|-----------------------|-----------------------|--------------|
| Hardness Shore A | 80 | 68 | DIN ISO 48-4 |
| Tensile strength | 6.7 N/mm ² | 7.0 N/mm ² | ISO 37 |
| Elongation at break | 140 % | 140 % | ISO 37 |
| Volume change | 3 % | 30 % | - |

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Oil resistance

Cure conditions: 0.7 % ELASTOSIL® AUX Crosslinker C1 (Dicumylperoxide), 15 min / 165 °C in press, post-cured 4 h / 200 °C

| Property | 500 h / 150 °C Lubrizol® OS 206 304 | Method |
|---------------------|-------------------------------------|--------------|
| Hardness Shore A | 70 | DIN ISO 48-4 |
| Tensile strength | 6.9 N/mm ² | ISO 37 |
| Elongation at break | 160 % | ISO 37 |
| Volume change | 14 % | - |

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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

- General Automotive Parts
- Molded Parts
- Roller Coatings

Application details

The compounds are recommended for all kinds of seals that come into contact with mineral oils. ELASTOSIL® R 701/80 S is used especially when low compression set is crucial for achieving good seal properties. The compounds may also be used for making high quality silicone-rubber-covered rollers.

Processing

ELASTOSIL® R 701/80 S is suitable for compression, transfer and injection molding and also for making extruded profiles. ELASTOSIL® R 701/80 S can be vulcanized with the peroxides normally used for compression molding or extrusion of solid silicone rubber.

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 701/80 S



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

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