ELASTOSIL® R 501/75 OH

High Consistency Silicone Rubber (HCR)

ELASTOSIL® R 501/75 OH is a peroxide curing HCR silicone rubber for the manufacture of flame retardant products.

Properties

The color of the rubber base is white. Colors will not match the RAL color codes of the masterbatches used in paste or pellet form in the compound (pastel colors).

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® AUX Heat Stabilizers can be obtained from the Technical Information Sheet "ELASTOSIL® AUX Stabilizers H" or from the latest brochures.

Specific features

- Flame retardant
- Heat resistant
- High LOI
- High tear-resistant

Technical data

Properties Cured

Cure conditions :
1.8 % ELASTOSIL® AUX Crosslinker E (50% paste of bis-(2,4-dichlorobenzoyl)-peroxide in silicone fluid), 10 min / 135 °C in press

Property	Condition	Curing Agent E	Method
Density	-	1.23 g/cm^3	DIN EN ISO 1183-1 A
Hardness Shore A	-	68	ISO 7619-1
Tensile strength	-	7.3 N/mm^2	ISO 37 type 1
Elongation at break	-	500 %	ISO 37 type 1
Volume resistivity	-	10^{15} Ohmcm	DIN IEC 93
Dielectric constant	50 Hz	3	DIN VDE 0303
Dissipation factor	50 Hz	14 x 10^{-14} tan δ	DIN VDE 0303
Dielectric strength	-	27 kV/mm	DIN IEC 243-1
Appearance	-	white	-
Oxygen index LOI	-	32 %	ASTM D 2863
Tear strength	-	34 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.

Applications

- Railway Cables

Application details

Cable insulations for household, automotive, railway, marine and aerospace applications where high flame retardancy is required.

Processing

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 501/75 OH

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

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