WACKER

ELASTOSIL®

ELASTOSIL® R 570/70
ELECTRICALLY CONDUCTIVE HCR SILICONE

Product description

Electrically conductive silicone rubber for press moulding, which are peroxide curing.

Properties

ELASTOSIL® R 570/70 is not suitable for vulcanisation using crosslinker E. The materials are black.

Special features

- good mechanical and electrical properties
- high conductivity
- low volume resistivity
- good heat resistance
- good rheological properties
- combustion products of low toxicity and corrosivity and low smoke density

Application

Control elements for cable accessories, contacts and keypads, interconnectors, electrically conductive rollers, electrodes.

Processing

Press moulding or extrusion and curing by cure vapor (CV).

We recommend running preliminary tests to optimize conditions for the particular application.

Comprehensive processing instructions are given in our leaflet "SOLID AND LIQUID SILICONE RUBBER - MATERIAL AND PROCESSING GUIDELINES".

IMPORTANT: in order to produce a ready-to-use-compound one has to incorporate an increased amount of peroxide.

ELASTOSIL® R 570/70 can be crosslinked with 3.0 % crosslinker C1 or crosslinker C6.

Too low peroxide concentrations lead to insatisfactory processing or scrap.

ELASTOSIL® R 570/70 is crosslinked at T > 170 °C.

In order to achieve the optimum electrical properties, it is necessary to post cure for at least 4 h at 200 °C after molding. The minimum crosslinking temperature is 170 °C.

Contact with solvents or oils (also with silicone fluids) should be avoided, as these results in changes of the electrical conductivity.

Storage

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.

Product data

Typical general characteristics	Inspection Method	Value
Hardness Shore A	DIN 53505	71
Crosslinker		C1 or C6
Appearance		black
Density	DIN 53479	1,19 g/cm³
Tensile strength	DIN 53504 S 1	6,40 N/mm^2
Elongation at break	DIN 53504 S 1	160 %
Tear strength	ASTM D 624 B	13 N/mm
Volume resistivity	DIN IEC 93	3,6 Ω cm
Compression set	DIN ISO 815-B (22 h / 175 °C)	29 %

All data are obtained after press curing with 1.2 % crosslinker C6.
 These figures are only intended as a guide and should not be used in preparing specifications.