

## High Consistency Silicone Rubber (HCR)

Peroxide cured vulcanizates made from this compound exhibit a unique combination of characteristics. They are noted for their good flexibility, high transparency, and mechanical properties.

### 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.

#### Specific features

- Food-contact
- General purpose

### Technical data

#### Properties Cured

##### Cure conditions:

1.5 % Crosslinker E, 50 % paste of bis-(2.4-dichlorobenzoyl)-peroxide in silicone fluid, 10 min / 135 °C in press, 4 h / 200 °C  
0.7 % Crosslinker C1 (dicumyl peroxide (98%)); 15 min / 165 °C in press, 4 h at 200 °C

Property	Condition	Curing Agent E	Curing Agent C1	Method
Density	-	1.15 g/cm <sup>3</sup>	1.15 g/cm <sup>3</sup>	DIN EN ISO 1183-1 A
Hardness Shore A	-	61	62	DIN ISO 48-4
Tensile strength	-	11.0 N/mm <sup>2</sup>	11.0 N/mm <sup>2</sup>	ISO 37 type 1
Elongation at break	-	440 %	530 %	ISO 37 type 1
Compression Set <sup>(1)</sup>	22 h   175 °C	31 %	16 %	DIN ISO 815-1 type B method A
Appearance	-	transparent	transparent	-
Rebound resilience	-	59 %	56 %	ISO 4662
Tear strength	-	24 N/mm	26 N/mm	ASTM D 624 B

<sup>1</sup>post-cured 4 h / 200 °C

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

## Applications

- Cables for Household Appliances
- Calendered Sheets
- Dairy Applications
- E-Mobility Cables for EV/HEV
- Exhaust-Pipe Suspensions
- General Automotive Parts
- Ignition & Battery Cables
- Measurement & Control Cables
- Molded Parts
- Profiles & Tubings
- Sanitary
- Spark-Plug Boots
- Vibration Dampers

## Application details

General purpose grade that may be used for producing molded, extruded or calendered articles like seals, gaskets, sheets, tubings and profiles.

Postcured parts can be used for food contact applications and are suitable for use under the Recommendation "XV. Silicones" of the BfR and FDA § 177.2600 under observance of any given limitations on extractable and volatile substances.

## 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