
Packaging

RHODORSIL RTV 585 is supplied in 1kg, 5kg and 20kg kits including the necessary quantity of **CATALYST 60R**.

It is also available in 200kg drums, in which case the catalyst is supplied in a separate pack.

Storage and shelf life

RHODORSIL RTV 585 and **CATALYST 60R** must be used within 12 months of delivery.

Safety

Please refer to the Safety Data Sheets on **RHODORSIL RTV 585** and **CATALYST 60R**.

Warning to users

The information contained in this document is given in good faith based on our current knowledge. It is only an indication and is in no way binding, particularly as regards infringement of or prejudice to third party rights through the use of our products.

Rhodia guarantees that its products comply with its sales specifications.

This information must on no account be used as a substitute for necessary prior tests which alone can ensure that a product is suitable for a given use.

Users are responsible for ensuring compliance with local legislation and for obtaining the necessary certifications and authorisations.

Users are requested to check that they are in possession of the latest version of this document, and Rhodia is at their disposal to supply any additional information.



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Characteristics
(cont'd)**3. Cured rubber properties**

3.1 Measurements made after 4 days curing at 25°C.

3.1.1	On specimen 6mm thick: Shore A Hardness, points, approx. (ASTM D 2240)	25
3.1.2	On film 2mm thick: Tensile strength, MPa, approx. (BS 903: Part A 4: Die 2)	4.0
	Modulus at 100% elongation, MPa, approx. (BS 903: Part A 4: Die 2)	1.0
	Elongation at break, %, approx. (BS 903: Part A 2: Die 2)	350
	Tear strength, kN/m, approx. (ASTM D 624 – Die A)	20

3.2 Physical properties

	Linear shrinkage, %, approx.	0.3 – 0.7
	Coefficient of cubic expansion, K-1, approx.	0.0009

Additional information

4.1 Re-homogenisation

To ensure homogeneity we recommend that **RHODORSIL RTV 585** be thoroughly stirred before use. This can be done in the original container, either manually with a spatula, or with a mechanical stirrer. Care should be taken to minimise the introduction of air bubbles into the liquid. In order to remove any introduced air bubbles de-gassing should be carried out under a primary vacuum of 15 to 40 mbar for about 5 to 10 minutes taking care to break the vacuum twice.

4.2 Changing the viscosity and the hardness

It is possible to lower the viscosity of **RHODORSIL RTV 585** by adding RHODORSIL DILUENT C. Such an addition of diluent will automatically produce a reduction in the hardness of the cured rubber and it will also reduce the cure rate. It is suggested that diluent be added initially at a rate of 10% by weight of RTV, though higher addition rates can be tolerated. It is important that the user conducts his own trials to determine the combination that is optimal for their requirements. It is also possible to make **RHODORSIL RTV 585** thixotropic by addition of a special catalyst RHODORSIL THIXOTROPIC CATALYST PC 37. This enables **RHODORSIL RTV 585** to be used for taking impressions of vertical or overhanging surfaces.

RHODORSIL RTV 585 / CATALYST 60R

May 1998

TECHNICAL DATA SHEET

Description

RHODORSIL RTV 585 is a two-component silicone elastomer which cures at room temperature by a polycondensation reaction. It produces a flexible elastic material with excellent tear strength.

RHODORSIL RTV 585 is normally cured with 2 percent by weight of **CATALYST 60R**.

Advantages

- A versatile elastomer combining durable tear strength with low hardness.
- High fidelity moulds from which a large number of casts can be made.
- Compatible with a wide variety of casting materials (wax, plaster, polyurethane, polyester and concrete).

Uses

For making moulds and reproductions of objects of complex form with strong undercuts (sculptures, statuettes, furniture, decorative elements for buildings, stage decoration).

For preparing extremely high tear strength, high tensile strength moulds. Very good for large moulds where rigidity and long-life are required. Suitable for use with highly alkaline casting mediums such as plaster, cement and concrete.

Characteristics

1. Before mixing

PROPERTIES	RHODORSIL RTV 585	CATALYST 60R
Aspect Colour	viscous liquid Beige	very fluid liquid colourless to straw yellow
Specific Gravity at 25°C, approx.	1.2	0.96
Viscosity at 25°C, approx.	30,000 – 50,000	-

2. Mixing ratios

RHODORSIL RTV 585	100 parts
CATALYST 60R	2 parts
Pot life of the catalysed mixture at 25°C, approx.	2 hours
Time after which the elastomer can be handled (or removed from the mould) at 25°C, approx.	24 hours

NOTE: The product is supplied with 3% catalyst, however we recommend that under normal conditions, for best overall properties, a catalyst level of 2% to be used.