



RTV 515, RTV 530

General Purpose Mouldmaking Materials

Product Description

RTV515 and RTV530 are general purpose, two component condensation cure mouldmaking compounds that cure at room temperature after addition of Beta 7 catalyst. Mix ratio is 5 parts catalyst on 100 parts RTV by weight. RTV515 is a 15 shore A hardness product. RTV530 is a 30 shore A hardness product.

Key Performance Properties

- Low viscosity
- Chemical resistance
- Easy mould release
- Flexible
- Compatible with most moulding materials
- Excellent detail reproduction
- Room temperature cure

Applications

The general purpose, two component condensation cure mouldmaking compounds RTV515 and RTV530 are used in the shoe industry as well as for simple reproductions that do not contain large undercuts.

Moulds made from RTV515 and RTV530 are compatible with most types of moulding materials, such as epoxies, acrylics, polyurethanes, low melt alloys, polyester, wax, concrete and many other composite materials.

The mix ratio with the catalyst Beta 7 is 100 parts base compound on 5 parts catalyst by weight.

Typical Product Data

Typical uncured properties:

Base Compounds:

Property	Method	RTV515	RTV530
Colour		Off White	Off White
Density (g/cm ³)		1.20	1.12
Viscosity (mPa.s)	Brookfield	8.000	15.000

Catalyst:

Property	Method	Beta 7
Colour		Translucent
Density, g/cm ³		0.96
Viscosity (mPa.s)	Brookfield	28

Typical mixed properties:

Mixed with Beta 7 at mix ratio 100 parts RTV:5 parts Beta 7 by weight.

Property	Beta	RTV515	RTV530
Pot life (min)	7	50	100
Cure time (hrs)	7	24	24

Typical cured properties:

Cured with beta 7 at mix ratio 100:5. Data obtained on 2 mm sheet after 24 hr RT cure.

Property	Method	RTV515	RTV530
Hardness,(ShoreA)	DIN53505	15	30
Tensile strength (MPa)	DIN53504	1.2	1.8
Elongation at break (%)	DIN53504	300	200
Tear Strength (N/mm)	ASTM D-624 Die B	2	2

Specifications

Typical product data values should not be used as specifications. Assistance and specifications are available by contacting GE Bayer Silicones Technical Service RTV1 and RTV2.

Instructions for Use

It is recommended to homogeneously mix the base compounds before use.

Mixing:

Select a mixing container 4-5 times larger than the total volume of material to be mixed. Weigh out the selected RTV and beta catalyst (in a ratio of 100:5 by weight). Stir for several minutes scraping the sides and bottom of the container carefully to produce a homogeneous mixture. When using power mixers, avoid excessive speeds which could entrap large amounts of air or cause overheating of the mixture, resulting in shorter pot life.

The air entrapped in the mixing step needs to be removed to eliminate voids in the cure product. This can be done by exposing the material to a vacuum of 10-20 mbar. The material will expand, crest and reduce to about the original level. Degassing is usually complete about two minutes after frothing ceases.

Automatic equipment designed to meter, mix and dispense a two component silicone liquid elastomer will add convenience to continuous large scale operations.

Curing:

After mixing the selected RTV/Beta combination, the material will cure at room temperature.

The system is sensitive to changes in heat and humidity and therefore variations in cure speed may be seen if one or both variables are changed.

Handling and Safety

Material Safety Data Sheets are available upon request from GE BAYER SILICONES. Similar information for solvents and other chemicals used with the GE Bayer products should be obtained from your supplier. When solvents are used, proper safety precautions must be observed.

Storage and Warranty Period

The warranted shelf life will be indicated by the ' use before date' on the associated documents with a minimum of 4 months when stored in the original unopened containers below 27° C.

Availability

RTV515 is available in 20 kg pails. RTV530 is available in pails of 5 and 20 kg as well as in drums of 200 kg.
Beta 7 is available in bottles of 50 and 250 ml as well as in containers of 1 and 10 kg.

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