## **Product information** Silicones



# **RTV 735**

## FEATURES

#### • Transparent

- Excellent release properties
- High mechanical properties
- Long shelf life

## **COMPOSITION**

- RTV 735 A silicone rubber
- RTV 735 B platinum catalyst



RTV-2 silicone rubber room temperature curing by addition reaction, 35 Shore A hardness. Transparent, contains oils for an easily release, excellent mechanical properties and dimensional stability at high temperatures, negligible shrinkage. Designed for molding complicated parts with precise dimensions, repetitive casting applications, ceramic, vacuum casting molds and mold making.

## APPLICATIONS

• Rapid prototyping automotive, plaster, concrete decorations.

## **TYPICAL PROPERTIES**

This data does not constitute the Product Sales Specifications. The values indicated refer to typical properties and are not to be understood as extreme minimum or maximum values. They do not constitute a guarantee of product conformity and do not relieve the buyer from the need to test the suitability of the products before use or placing them in his production cycle. Please contact your local sales representative to obtain the product specifications.

Property	Unit	Value
Color (RTV840/C850)	Visual	Tranparent / colorless
Density at 23°C	g/cm <sup>3</sup>	1.18
Viscosity at 23°C (RTV840/C850)	mPa.s	40000 - 45000
Mixing ratio A : B	pbw	100:10
Working time at 25°C	minutes	90 - 120
Curing at 25°C	hours	24
Linear shrinkage [500x50x10mm]	%	<u>&lt;</u> 0.1
Hardness	Shore A	35
Tensile strength	MPa	3.8 - 4.0
Tear strength	N/mm	17 - 20
Elongation at break	%	500 - 540

## SETTING

Make sure the master model is clean, free of dust and dirt. If there are glass or ceramic parts, it is possible that the silicone rubber will stick to them, so it is advisable to use a release agent.

### INHIBITION

RTV-2 addition silicones are subject to inhibition by various products: In general, products with a high moisture or sulphur content are potentially the most harmful.

#### Inhibiting substances

Natural rubber vulcanized with sulphides RTV from polycondensation PVC stabilized with tin salts Epoxies catalyzed with amines Organic solvents

## **MIXING AND CASTING**

Use clean containers, which have a capacity to hold up to 5 times the volume of the rubber used during degassing. Both components must be at a temperature between  $+15^{\circ}$ C and  $+25^{\circ}$ C. Add the catalyst to the rubber in the correct ratio, carefully weighing the quantities. Mix the two components until a homogeneous mixture is obtained, paying particular attention to the walls and bottom of the mixing vessel. Avoid entrapping air during mixing. Vacuum degas with intermittent evacuation. In case of automatic mechanical dosing, the

two components must be degassed before the mixing head. Recommended vacuum conditions: 30 - 50mbar intermittently for 5 - 10 minutes. Pour the mixture by gravity or by pressure injection. In the presence of complex molds, degas again after casting.

## CURING

In case of hardening at room temperature wait 24 hours before demoulding. If hardening is carried out at high temperatures, the mold must be left to rest for at least 10 minutes before being placed in the oven. The shrinkage of the silicone increases with the increase of the crosslinking temperature.

## HANDLING PRECAUTIONS

The information for a correct and safe handling of the products is contained in the safety data sheet. Consult the safety data sheets before use for complete information on the risks to health and the environment and for the suitable protective devices to be adopted. Share the safety data sheets with all staff involved in the use of the products.

## **USABLE LIFE - STORAGE**

Store in original unopened containers at a temperature between  $+15^{\circ}$ C and  $+25^{\circ}$ C. Be sure to close containers tightly after use. This material, when stored under the specified conditions, has a shelf life of 12 months from the date of manufacture.

## PACKAGING

RTV735A is supplied in 20kg packs, RTV735B in 1kg packs. For other packaging please contact our sales department.

## LIMITATIONS

This product is neither tested nor represented as suitable for food contact, skin contact or medical uses.

## LIMITED WARRANTY

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