



Product Description

RESION GT40 is a high-quality, highly transparent two-component silicone rubber based on an **addition-curing system with a platinum catalyst**. The material is designed for producing durable, flexible silicone molds.

RESION GT40 has a **1:1 mixing ratio** and can be cured at room temperature. Accelerated curing is possible by applying heat.

Due to its good flow properties, the material is suitable for accurately reproducing fine details. The cured silicone rubber has a Shore A hardness of approximately 40 and combines good tensile and tear strength with high elongation at break.

Applications

RESION GT40 is suitable for applications including:

- Production of silicone molds for jewelry and decorative models
- Mold making for epoxy and polyurethane casting
- Prototype and model molds
- Applications in the electrical and electronics industry
- Prototype parts for the automotive industry

The silicone rubber is suitable for producing durable molds where good detail reproduction and easy demolding are required.

Properties

- Highly transparent
- 1:1 mixing ratio
- Good flow properties
- Easy to process
- Easy demolding
- High elongation at break
- Good tensile and tear strength
- Good aging resistance
- Temperature resistance up to approximately 220–250 °C
- Low shrinkage
- Platinum-catalyzed addition-curing system



Mixing Ratio

A : B = 1 : 1 by weight

Mix both components thoroughly in the specified ratio until a homogeneous mixture is obtained.

Deviation from the specified mixing ratio may affect the curing process and the final properties of the material.

Processing

RESION GT40 can be processed and cured at room temperature.

After mixing, the material has a working time of approximately **40–50 minutes at 25 °C**.

For optimal processing:

1. Ensure that the model and mold setup are clean, dry and free from contaminants.
2. Accurately weigh components A and B in a 1:1 ratio.
3. Mix both components thoroughly until a completely homogeneous mixture is obtained.
4. Avoid unnecessary entrainment of air during mixing.
5. Pour the material carefully over or around the model.
6. Allow the material to cure completely before demolding.

Curing

At approximately **25 °C**, the specified curing time is approximately **4–5 hours**.

Curing can be accelerated by applying heat. At approximately **60 °C**, the specified curing time is approximately **20–30 minutes**.

The actual curing time may depend on factors including layer thickness, ambient temperature, and the temperature of the material and mold.



Technical Properties

Property	Value
Color	Highly transparent
Mixing ratio A:B	1:1
Working time at 25 °C	40–50 min.
Curing time at 25 °C	4–5 hours
Curing time at 60 °C	20–30 min.
Hardness	Shore A 40 ± 2
Tensile strength	> 5 MPa
Tear strength	> 15 kN/m
Elongation at break	> 350%
Mixed viscosity	25,000 ± 500 mPa·s
Shrinkage	< 0.1%
Temperature resistance	approx. 220–250 °C

The stated technical values are typical values and do not constitute product specifications.



Important Information Regarding Addition-Curing Silicones

RESION GT40 is a **platinum-catalyzed addition-curing silicone rubber**. This type of silicone is sensitive to certain substances that can inhibit the curing process. This may result in localized or complete curing inhibition.

Avoid contact with:

- Condensation-curing silicones and materials that have been in contact with them
- Tools previously used for condensation-curing silicones
- Substances containing nitrogen, sulfur or phosphorus compounds
- Certain ionic compounds
- Compounds containing, among others, tin, arsenic, mercury or lead
- Untested pigments, fillers and powders

Use only clean and suitable tools and materials.

If there is any doubt about the compatibility of a model, release agent, pigment, filler or other material, a small-scale compatibility test is recommended before use.

Contamination from, for example, smoke can also negatively affect the curing of platinum-catalyzed silicones.

Storage and Shelf Life

Store the product tightly closed, in a dry and cool place, in the original packaging and preferably at a temperature of no more than **25 °C**.

The stated shelf life is **12 months** when stored in the original, unopened packaging under the recommended conditions.

After opening, shelf life may be affected by exposure to moisture, contaminants and air.

Safety

Before use, consult the current Safety Data Sheet (SDS) for information regarding safe use, personal protective equipment, storage, transport and disposal.

Ensure adequate ventilation during processing and avoid unnecessary contact with skin and eyes.



Packaging

RESION GT40 is supplied as a two-component system:

A + B, mixing ratio 1:1

Available packaging sizes are listed on the product page.