

# SILICONES RTV1 & RTV2



## What is a silicone RTV1 or RTV2?

RTV1 are single-component silicones which cure thanks to the moisture in the air. These products can be applied up to 10mm thick.

They can:

- Protect components against humidity and salt spray.
- Protect against temporary exposure to water.
- Bond components.
- Provide mechanical support to component welds.
- Ensure water tightness.

RTV2 silicones are two-component silicones that allow electronic systems to be encapsulated under a high thickness. The main advantages over polyurethane and epoxy resins are:

- Resistance to high temperature
- Flexibility

Depending on your needs, ABchimie will direct you to the solution best suited to your application

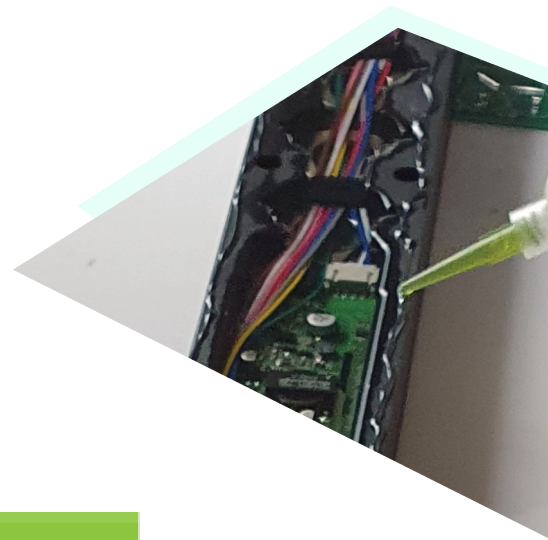
## Application example:

RTV1 silicone used for an **automotive customer** for vehicle lighting and mechanical capacitor support:

**Silicone R14968, transparent & silicone. RTV1 Neutral.**

**Highlight:** Neutral silicone suitable for electronics with a fast skin formation time: (about 15 min).

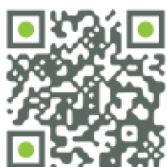
**Industrial use:** +10 years.



## ► SILICONES RTV1 & RTV2

| RTV 1                  | R14968                             | S800               | S803                               | SP7605            | TSE392/397/399                     | RTV133             |
|------------------------|------------------------------------|--------------------|------------------------------------|-------------------|------------------------------------|--------------------|
| Type                   | ALKOXY                             |                    |                                    |                   |                                    |                    |
| Color                  | Transparent                        | White, Black       | Translucent                        | Translucent       | Transparent, white                 | Black              |
| Consistency            | Self levelling                     | Thixotropic        | Self levelling                     | Fluide            | Thixo, self levelling, fluide      | Thixotropic        |
| Viscosity (cP) at 25°C | 30 000                             | Paste              | 30 000                             | 7 000             | Paste, 50 000, 2 500               | Paste              |
| Hardness (Shore A)     | A15                                | A45                | A15                                | A20               | A20                                | A45                |
| Temperature range      | -40°C<br>+200°C                    | -40°C<br>+150°C    | -40°C<br>+200°C                    | -40°C<br>+180°C   | -60°C<br>+205°C                    | -40°C<br>+205°C    |
| Tack free time (mn)    | 20                                 | 20                 | 20                                 | 15                | 5, 10, 10                          | 60                 |
| Characteristics        | Waterproof high thickness, bonding | Waterproof bonding | Waterproof high thickness, bonding | Topping           | Waterproof high thickness, bonding | Waterproof bonding |
| Standards              | Meets UL94 HB                      | UL94 HB RTI 105°C  | UL94 HB RTI 105°C                  | UL94 HB RTI 105°C | UL94 HB / MIL 46146B               | UL 94V0            |
| Packaging              | 30cc, 310ml, 20kg                  | 310ml, 20kg        | 310ml, 20kg                        | 310ml, 20kg       | 82ml, 310ml, 18kg                  | 310ml, 20kg        |

| RTV2                   | RTV577           | RTV11           | R76             | RTV615          | XE14 B7892      | THERMO-SINK35-5          |
|------------------------|------------------|-----------------|-----------------|-----------------|-----------------|--------------------------|
| Type                   | Condensation     | Condensation    | Addition        | Addition        | Addition        | Addition                 |
| Color                  | White            | White           | Transparent     | Transparent     | Black           | Light grey               |
| Viscosity (cP) at 25°C | 700 000          | 12 000          | 7 000           | 4 000           | 1 300           | 15 000                   |
| Hardness (Shore A)     | A50              | A42             | A33             | A45             | A60             | A25                      |
| Temperature range      | -115°C<br>+204°C | -60°C<br>+205°C | -55°C<br>+220°C | -60°C<br>+205°C | -55°C<br>+200°C | -40°C<br>+250°C          |
| Working time (mn)      | 120              | 90              | 15-20           | 240             | 120             | 20                       |
| Characteristics        | Low temperature  | Potting         | Potting         | Optical quality | 0,8Wm°K         | 3,4Wm°K<br>Low degassing |
| Standards              | -                | FDA             | -               | FDA             | UL 94V0         | UL 94V0                  |



Find all detailed products  
on our website

ABchimie offers a wide range of silicones, this list is not exhaustive, we will be happy to advise you on the most appropriate product for your application.