

## Technical Data Sheet

### food grade silicone –A10



#### Description

A10 is a kind of two part silicone rubber in addition cure or platinum cure type with mixing ratio of 1:1 or 10:1. It can cure at room temperature as well as under heat. It's a kind of food grade silicone which has got the United States FDA certification. And mainly used for mold making.

#### Application

DC-A10 silicone Rubber is mainly used for making molds of concrete stone, GRC, polyurethane products; wax, candle decoration; rapid prototyping and tire molds; chocolate, candy and similar products' molding. and also can be used for insole making.

Model	color	Mixing ratio (%)	Pot life (mins, under 25 C)	Curing time (hrs, under 25°C)	Hardness (shore A)	Tensile Strength (Mpa)	Tear Strength (kN/m)	Viscosity (After A/B Mixed, mPa.s)	Shrinkage rate (%)	Elongation (%)
A10	Translucent ; Adjustable	1:1 Or 10:1	20-40	(3-5hrs under 25°C); (20-30mins under 60°C)	10±2	>4.5	>17	1800±2000	≤0.1%	>650%

#### Characteristics

- An exceptional fluidity and good operability, easy to demold
- Aging resistance, high temperature resistance (220°C-250°C)
- Environmentally, food-grade, FDA Certification.
- Good tensile and tear strength
- Outstanding bubble releasing
- Very Low shrinkage
- Non-deformation

Step 1: prepare the original molds

Prepare an perfect original mold and clean it totally before operation

Notes: Make sure your original molds and operation tool were cleaned up totally to avoid uncured problem.

#### Operation Instructions

**Step 1:** prepare the original molds

Prepare an perfect original mold and clean it totally before operation.

\* Notes: Make sure your original molds and operation tool were cleaned up totally to avoid uncured problem .

**Step 2:** Take 100 G part A and 100 G part B (Or 100 G part A and 10 G part B) and mix them evenly.

\* Notes: Addition cure mold making silicon rubber is two parts flowing liquid, Pls follow the step strictly:

1. Weigh the two part exactly by electronic weight. If any part not in exactly weight, it may cause changing of hardness, or even cause uncured problem.

2. Mix part A and part B evenly. Otherwise the silicon rubber will be partly solidified and this will give

birth to difficulties in your final operation. What's more, the finished molds will meet a short life. All of these will cause a waste of silicone rubber.

**Step 3:** Vacuum pumping Without exception, this step takes less than 10 minutes. Otherwise, it will cause cross linking reaction, and no more further steps will be available.

**Step 4:** Pouring casting or Brush operation

1. For simple pattern products we suggest use pouring operation way, which will be very easy to operate and demould. Pourable silicone require low viscosity which will be easy to flow smoothly and easy to de-air .
2. For delicate pattern products we suggest use brushing operation way, which can copy the pattern exactly. Brushable silicone require high viscosity which won't be easy to flow away and easy to brush .
3. We suggest to set the silicone mold for another 12 hours after demould before you put it into a large production .

**Warm Tips :**

As addition cure silicone is a kind of platinum cure system, which will be easy to cause uncured problem ,so pls kindly follow the tips as below :

- \* Do not mix with liquid condensation silicone rubber or even the tool which used for condensation silicone rubber.
- \* Do not mix with organic matter which contains N, S, P organics and ionic compound like Sn, As, Hg, Ph. (Do not smoke when you use this addition silicone rubber)
- \* Do not add any pigment or powder into the addition cure silicone rubber without any testing to prevent uncured problem.

**Shelf life**

Twelve(12) months when stored under dry and cool place by original package under 25°C