

SILICONES

and more

Characteristics

- ✓ Flexible, Strong, Universal
- ✓ White, Good Fluid, Bleeding
- ✓ Shore (A) 23 ~ 28
- ✓ Low shrinkage (<0.3%)

Silicone Condensation 20

These Silicones are ideal for making soap Moulds, Candle Moulds, Concrete moulds etc.

The silicone Condensation 20 - A + B is a 2-component (poly-condensation curing) castable molding silicone which cures at room temperature. The silicone has a good fluidity and gives great detail while still remaining strong. Silicone C 20 -A + B are excellently suited for the casting of e.g. cement, plaster, wax, soap, and many other casting materials.

Technical data

Property	Unit	B component				
		Condensation B 5	3081 F	T21	T51	T47
Mix ratio in weight	A:B	100:5	100:5 (4,5~5,5)	100:5 (4,5~5,5)	100:5 (4,5~5,5)	100:2 (1.5~3)
Potlife @j 20°C and 50% relative humidity	Minutes	30-40	20-30	>120	>120	5
Demould time @ 20°C and 50% relative humidity	Hours	16-20	16-20	48	48	0,5
Full strength after	Days	3-4	3-4	7	7	1
Hardness	Shore A	23-26	23-26	23-26	23-26	25-28
Viscosity @ 20°C	mPa·s	24.000 ± 2.000	25.000 ± 2.000	18.000 ± 2.000	18.000 ± 2.000	25.000 ± 2.000
Tensile strength	Kg/cm ²	>40	43,2	40	40	43
Elongation till break	%	>400	350	450	450	300
Tear strength	Kg/cm	>26	> 29.8	28	28	29
Liniair shrinkage	%	<0,3	< 0.3%	< 0.3%	< 0.3%	< 0.3%
Density cured	g/cm ³	1,08	1,08	1,08	1,08	1,08

Please note: the processing time and demoulding time are highly dependent on the mixing ratio and air humidity! When adding more than 5% silicone B (hardener) or at higher humidity, the processing time and demoulding time become shorter.

For standard use, the condensation B 5% catalyst is recommended.

If you want to process polyester in these moulds, we recommend using the special B component: Wacker T51 (5%)

If you want to process epoxy or polyurethane in these molds, we recommend using the special B component: Wacker T21 (5%)

If you want to work very quickly, we recommend using the special B component: Wacker T47 (1-2%). This B component may also be mixed with the original or above B components to achieve a speed of choice with the properties of the above B components.

Processing

The silicone Condensation 20, you can easily mix by hand or machine. Mix the A and B component carefully and in the specified proportion.

Condensation B 5 = 5%, so on 100 grams of A you use 5 grams of Condensation B 5.

3081 F = 5%, so on 100 grams of A you use 5 grams of 3081 F.

T21 = 5%, so on 100 grams of A you use 5 grams of T21

T51 = 5%, so on 100 grams of A you use 5 grams of T51

T47 = 1-2%, so on 100 grams of A you use 1 to 2 grams of T47

You can use up to 0.5% less or more harder. If you use less hardener, curing takes longer and air bubbles have more time to escape. Make sure not to use too little hardener, because then the silicone may no longer cure (properly). With more harder the curing will go faster, so that the mold is ready sooner. The disadvantage is that the mold will also age earlier and have more shrinkage bag. Process the mixture within the pot life (working time) and never make more than you can process within the pot life. Wait with demoulding until it has completely hardened.

Note: Potlife (processing time) and demolding time are highly dependent on the mixing ratio and Humidity! When adding more silicone B (harder) or at higher humidity, the pot life and demolding time become shorter!

Smearing or brushing

If you wish to make a mold by using a brush or spatula you need to add a 3rd component (0.6% -2% Thixo C). Typically 1% will do the trick. Thixo C thickens the mixture and makes it possible to set up the silicone against vertical surfaces. Please be aware that the mold in this case must be provided with a support cap. This support cap may consist of gypsum bandages or epoxy support cover or acrylic resin with glass fibre fabric.

Durability

Provided that the silicone is kept in a sealed package and stored cool and frost-free, the shelf life is at least 1 year.

Safety

Use splash goggles, suitable liquid-tight gloves, an apron and work in a well-ventilated area. See Safety Data Sheet for more information

Use/Do:

