ELASTOSIL® FX USER GUIDE
HOW TO WORK WITH THE FX RANGE

ELASTOSIL® FX platinum-cure silicone rubber products can be used to create realistic skin effects in movie, television and theater. This user guide contains helpful and relevant information on the storage, preparation, mixing and adjustment of ELASTOSIL® FX, ensuring that you get the best out of ELASTOSIL® FX for your special effects.

ELASTOSIL® FX product range

Product Info

ELASTOSIL® FX range consists of 4 base rubber grades and 4 additives. The base products are pourable, addition-curing, two-component silicone rubber grades (RTV-2) that cure at room temperature to form an elastic, flexible material.

Your Options with the ELASTOSIL® FX Range Toolbox:

- **Start by mixing ELASTOSIL® FX:**
  … 30 Gel A/B – Shore 00 hardness of ~30
  … 10 A/B – Shore A hardness of ~10
  … 20 A/B – Shore A hardness of ~20
  … 28 A/B – Shore A hardness of ~28

- **(Optional) adjust the curing time:**
  Speed up curing with ELASTOSIL® FX Fast Cure, or slow down curing and increase working time with ELASTOSIL® FX Slow Cure

- **(Optional) adjust the flow characteristics:**
  Adjust the flow of the base rubber from thin to thicker or paste-like with ELASTOSIL® FX Thixo

- **(Optional) adjust the final hardness:**
  Use ELASTOSIL® FX Softener to soften the base rubber without leaving the surface oily.

ELASTOSIL® FX A/B:
WEIGH AND MIX THE BASE RUBBER

Weighing & Mixing: Component A + B

1. Before you start mixing the A and B components, first think about how much material you will need to avoid waste: for a total of 100 grams, you will need 50 g of component A + 50 g of component B.

2. Switch on the scale. Place your clean mixing container on the scale, which will display the weight of the container. Press the Tare button to zero the scale.

3. Before you pour out the A and B components, please stir them thoroughly in their original containers.

4. Pour the required amount of component A into your clean mixing container and immediately close the lid of the original container.

5. Pour the same amount of component B into the mixing container (add it to component A) and immediately close the lid of the original container.

6. Thoroughly mix the components for at least 30 seconds for small amounts, taking special care to reach the corners and the bottom of your container. Scrape the sides with your mixing utensil and ensure that any residual material is mixed in thoroughly.

7. Curing begins once A and B have been mixed. This marks the beginning of the pot life, so be sure to process the material as soon as possible.

8. If you wish to de-gas with a vacuum chamber, make sure everything is set up and ready before starting the mixing.

ELASTOSIL® FX A/B in 5 + 5 kg pails with lids optimized for frequent open / closing

Preparation & Mixing – Important to Know

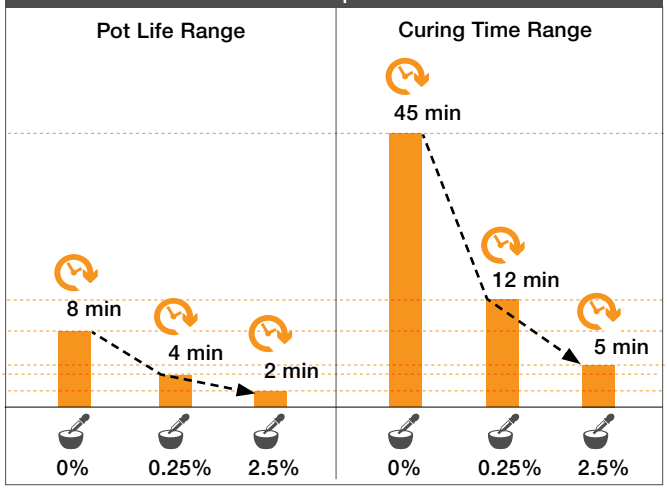
- The platinum catalyst is contained in component A.
- A and B components may only be used together if they have the same batch number.
- To ensure optimum flow of the material, the components must be stirred thoroughly in their containers before they are removed or processed.
- Platinum-curing silicones need to be weighed and mixed properly to ensure perfect curing.
- Curing can be affected by contact with a diverse range of materials. For example, materials that include sulfur or amino-tin compounds (RTV-2 tin catalysts). Do not use latex gloves; nitrile or vinyl gloves are preferred. Modeling clay can also inhibit curing.
- Curing time is affected by the ambient temperature – faster when warmer, slower when cool. Please mix a small test batch to ensure your actual temperature conditions will provide enough time to work with the material.

ELASTOSIL® FX FAST CURE OR SLOW CURE: SPEEDING UP OR SLOWING DOWN THE CURING TIME

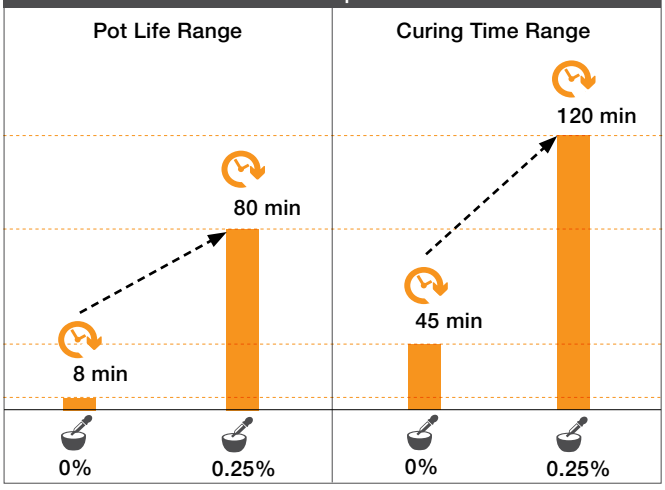
If you wish to change the curing time of the ELASTOSIL® FX base rubber, first weigh and mix the required amount of base material as described under Weighing & Mixing. Then add ELASTOSIL® FX Fast Cure or Slow Cure in the required amount and again stir thoroughly.

Our additives are designed to offer the maximum effect at a minimal, but still convenient dosage. Be sure to familiarize yourself with the effect by conducting small tests before beginning the real application.

ELASTOSIL® FX Fast Cure: Example with ELASTOSIL® FX 20 A/B



ELASTOSIL® FX Slow Cure: Example with ELASTOSIL® FX 20 A/B



These figures are intended as a guide and should not be used in preparing specifications.

Drop Dosing Recommendation: ELASTOSIL® FX Fast Cure (for Small Volumes)

Drops	Pot life / Working time	Curing time
0	8 min	35 min
7 – 10	6 min	20 min
20 – 25	3 min	10 min

Drops per 100 g ELASTOSIL® FX A/B

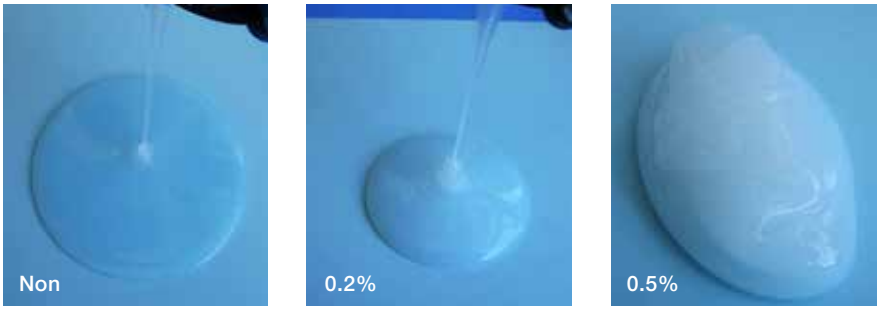
Drop Dosing Recommendation: ELASTOSIL® FX Slow Cure (for Small Volumes)

Drops	Pot life / Working time	Curing time
0	8 min	35 min
8 – 10	60 min	90 min
12 – 16	80 min	120 min

Drops per 100 g ELASTOSIL® FX A/B

ELASTOSIL® FX THIXO: ADJUST THE FLOW FROM THIN TO THICKER OR PASTE-LIKE

Addition of 0.2% up to 0.5% ELASTOSIL® FX Thixo



Drop Dosing Recommendation: ELASTOSIL® FX Thixo (for Small Volumes)

Drops	Flow
0	Best flow
0 – 10	Medium flow
20 – 25	No flow

ELASTOSIL® FX Thixo is added to thicken the base rubber for better workability on vertical surfaces.

ELASTOSIL® FX SOFTENER: ACHIEVE YOUR PREFERRED HARDNESS

Adjust Your Preferred Hardness by Adding ELASTOSIL® FX Softener

By adding ELASTOSIL® FX Softener, you can bring down the hardness of your ELASTOSIL® FX base rubber to achieve more "flesh-like" textures. The softer you go, the greater the tack will be, but the surface will never be oily.

First weigh and mix the amount of base material you need as described under Weighing & Mixing.

Then add the required amount of ELASTOSIL® FX Softener and again stir thoroughly.

Here are 2 sample calculations starting from ELASTOSIL® FX 20 and from FX 10. The amount of Softener to add is calculated as a percentage of the total of components A and B. Example: 50% addition = 50 g A + 50 g B + 50 g Softener

Sample Calculation Starting with ELASTOSIL® FX 20 and Adding a Certain Percentage [%] of Softener												
FX Softener [%]	**0**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**	**50**	
Shore A	20	17	13	10	8	6	5	3	2	---	---	**Shore A**
Shore 00	---	---	---	---	50	45	43	34	25	20	18	**Shore 00**
Tack	-	-	-	-	-	(-)	(-)	(+)	+	++	++	**Tack**

Sample Calculation Starting with ELASTOSIL® FX 10 and Adding a Certain Percentage [%] of Softener												
FX Softener [%]	**0**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**	**50**	**FX Softener [%]**
Shore A	10	8	7	6	3	3	2	1	---	---	---	**Shore A**
Shore 00	---	50	48	38	33	30	25	18	13	11	0	**Shore 00**
Tack	-	-	-	-	(-)	(-)	(+)	+	++	++	+++	**Tack**

- non-tacky
(-) very slight
(+) slight
\+ more
++ strong
+++ very strong

Calculation example for [%]: A/B + 10%, e.g. 100 g A + 100 g B + 20 g Softener

General Information

Storage

- ELASTOSIL® FX products are best stored between 5 °C and 30 °C in the tightly closed original container. The best-before date of each batch appears on the product label.
- Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable. In this case, however, the properties required for the intended use must be checked for quality assurance reasons.
- Use up residual material in containers as soon as possible and take care to close containers immediately after use.

Health & Safety

You should familiarize yourself with any products, materials or equipment you are using and take appropriate health and safety measures to protect yourself and others around you from harm. Please consult the relevant MSDS information (Material Safety Data Sheet).

Further Help

For more information contact your local supplier or infodrawin@wacker.com or +49 89 608 690

ELASTOSIL® FX Softener in 2 kg bottle with convenient handle

ELASTOSIL®

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