Androswatch - make your own contraceptive ring

ଜିଜି• ≪ା ଭରଶର ୬) ୨୧୫		The Androswatch is an adjutthat enables the practice of so if worn 15 hours a day, every or open-source license* . manufactured using a 3D-printer Whether you're just starting or practicing a physical activadaptability has been designed testicular contraception user those of the Androswitch.	istable silicone ring - like a bracelet - -called "male" thermal contraception, day. Androswatch is released under an It is designed to be simply ed mold and biocompatible silicone. out with contraception, trying it on, ity that requires greater restraint, its ed to meet the growing needs of s. Its 5 sizes correspond exactly to
0 0 0		material required	
		tools	consumables
QR code Video		 3D printer computer equipped with Cura (free software) kitchen scales spatula protective equipment (goggles, gloves, smock, etc.) oven scalpel/small cutter, scissors 	• coil of endocrine-disruptor- free PLA (750g = approx. \in 30) • biocompatible silicone (900g = $60 \in$) • silicone oil (400g=22 \in) • mild soap • indicative cost: \in 7 / ring
tutorial			
production timing	,		
1. mold printing About 24h. (2 parts, part) From 1 mold yc rings on average.	2. silicone molding 12h per Approx. 6h including pou get 20 polymerization (hardening).	3. demolding, finishi	ng + 4. baking 1 1 1 Stop polymerization: 1h in 1 oven at 100°C.

step 1a: setting up the 3D file



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print settings	recomment ed setting
layer height	0.16mm
wall thickness	1.2mm
filling density	15%
PRINT SPEED	40mm/s
initial layer speed	20mm/s
fan speed	50%

Download both mold parts from the Androswatch page on thoreme.com. We recommend printing each file separately.

the window In "Printing In the parameters" section on the right, enter the following data to obtain the optimum ratio between printing time and mold quality.



15 minutes.

I Materials: a computer running Cura or other 3D printing

s of t w a r e , files downloaded from thoreme.com. Average time:



10 hours 44 minutes 12.41m Save to disk Open the file on Cura. Use the arrows to position the volume in the middle of the tray. Printing on the edges may weaken the mold and result in a poor finish.

Press "cut" in the bottom righthand corner. Once the volume has been decomposed, you can check that there are no printing problems.

You can send it to the 3D printer using a USB key, SD card or Wi-Fi connection.

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step 1b: mold printing



For better temperature stability - which will ultimately lead to better printing - we recommend covering your printer with a cardboard or wooden box.

Import the file to your printer. Before printing, heat the plate It is preferable to use a temperature of 40°C.

This improves print quality and facilitates mold release, protecting the mold and plate. Each machine has its own solution

Ziflex" plate, deformable metal trays...



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cuter or scalpel.

Average duration: 24 hours.

Materials: 3D printer, 250g of endocrine disruptor-free PLA,

Congratulations, you've printed both parts of the mould!

Now all you have to do is check that they fit together correctly. If there is a gap between the two parts, the moulding will fail!



Using a cuter or scalpel, remove any stray filaments remaining on the mold. This is the finishing stage.

Check that the joint between the two parts of the mold is flat enough.

step 2a: mixing the silicone



For this step, you need to protect your skin and eyes, as well as your clothes. Be sure to wash your hands thoroughly with soap.

Prepare the two parts of the silicone mixture, A and B.

Then pour in the second part. The two mixtures should be poured in equal quantities (1/1). A difference of just a few grams will greatly impair the quality of the mixture. Materials: silicone (base and hardener) 80g, silicone oil 8g, scale, spatula, protective material and glass container. Average duration: 15 minutes.



Pour 40g of the first part of the silicone (base or hardener, in no particular order) into a small container. Measure the quantity with a kitchen scale, after taring (removing the weight from the container).

Then pour in the silicone oil, 10% of the rest of the mixture.

If the mixture is 80g, add 8g of oil. The more oil you put in, the more flexible the ring will be, but beware: too much elasticity can impair the ring's long-term wearability and reliability.

Using a spatula, gently mix the silicone precipitate to blend the different components and evacuate any bubbles.

Stir slowly and evenly, thoroughly, to activate the mixture. However, this step should last no longer than 3 minutes, as mixing for too long will cause the silicone to harden.

Leave to rest for 3 minutes before pouring into the mould.

step 2b: molding the ring



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To improve mold life and make molding easier, you can coat the inside of the mold with lubricant or silicone oil.

You'll notice that the molds have different appearances: the inner part of the Androswatch is designed with retaining studs for a better hold.

At the start of casting, tilt the mold slightly with the textured part facing down.

The silicone will flow down the sprue and back up by gravity, to avoid internal bubbles as much as possible.

Pour the silicone patiently, pausing to allow the silicone to flow down the funnel.

step 3: demolding and finishing

Materials: Silicone and mold, lubricant, wooden wedges, i n n e r tube or large rubber band. Average duration: 6h (with polymerization).



As the silicone is poured at an angle to minimize bubbles, this textured part will be at the bottom of the bias. Don't hesitate to mark the two parts to help differentiate them.

You can then secure them with wooden wedges and an inner tube.

You can see that the silicone has risen to t h e top of the funnel. When the silicone has risen to this level, the molding is complete.

Wait 5 hours for polymerization to finish. Don't put the mold in the oven! This will weaken the polymerization and the ring.

r		٦.
ı	Materials: Cuter, short knife, scissors, Average	i.
L	time: 10 minutes.	÷
i.		j.



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Check with a knife or spatula that polymerization is complete.

You can then remove the two wooden wedges and the inner tube.

Wash your hands with soap. Gently loosen the ring with the sprue and clean the mold of residues.



Put on protective gloves. Gently run a knife through the gap between the two parts of the mold, about 1 cm deep.

Only after you've gone all the way around the mold can you pull the two parts apart: this prevents damage to the mold and the ring.

Using a pair of scissors, detach the sprue and trim the Androswatch, removing any protruding silicone.

Be careful not to attack the ring's structure by cutting too much: a small burr is better than a ring weakened by cutting too much.

step 4: baking

Ľ.	Materials: An oven set at 100°C.	I
Ľ	Average time: 1 hour.	Т
E.		-

Simply place the unmolded ring in the oven at 100 $^\circ\mathrm{C}$ for one hour to stop the polymerization process.

Congratulations, your ring is finished! After washing it with soap, all you have to do is wear it.



Androswatch - instructions for use



Once out of the oven, all you have to do is check that the ring is ready for use.

If the inside of t h e ring is glazed with hundreds of bubbles, very small bubbles that weaken the silicone, you'll need to remake the mold by mixing better.



The Androswatch can be opened and closed simply by means of an olive that can be attached to the various openings.

This allows you to change settings within the same day, or over a longer wearing period.



diameter of erect penis	inside diameter ring	Andro-Switch (basic/soft)	AndroSwatch
2.9 > 3.5 cm	31.5 mm	A/S	
3.5 > 4 cm	34.7 mm	N / W	
4 > 4.5 cm	35.9 mm	D/I	
4.5 > 5 cm	41.3 mm	R/T	
5 > 5,5	44.7 mm	0/0	V

The five AndroSwatch sizes correspond to those of Androswitch.



First close your androswatch on the size of your choice.

Then pass your penis through the ring, so that it reaches the base of your penis.

Pull the skin of your scrottum through the ring, without touching the testicles, which rise upwards. "mechanically" in the inguinal pouch, at pubic level.

Place your ring firmly at the base of your genitals, pulling it left, right, up and down. The testicles must be above the penis, and remain in this position for 15 hours a day.



You can check that the size is right by squatting for about twenty seconds: if the ring holds and the testicles stay up, it's good!



To remove the ring, simply loosen the olive and release the penis, to avoid rubbing.

to find out more

Getting your testicles up is all very well, but knowing how your body and fertility work is even better! Find out more about thermal contraception, its studies, how it works, what's going on, schedules and user groups near you on the following websites:

thoreme.com instagram: @slowcontraception

Le Cœur des Zobs

contraceptionmasculine.fr The Contracepted

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planning-familial.org The man on the pill

as well as the comic strips