## BREWING BEER WITH BESSERBRAUER'S BRAUBOX





The first step is to extract the sugar from the malt. This will later be converted by the yeast into alcohol and carbon dioxide. We do this by adding water to the malt and then heating the mixture (the mash).

### Time: 60 min.

What you will need from your brewing kit: malt, thermometer Kitchen utensils needed: 1 large stock pot (8-10 litres),

Time: 30 min.

We would be happy to answer any of your questions and look forward to receiving your feedback and photos: hallo@besserbrauer.de

Beer brewing consists of 5 steps: mashing, lautering, boiling, fermenting and bottle ageing.

Brew day requires about 4 hours (although beginners should allow a bit longer). During this time, you will be mashing, lautering, boiling the hops and preparing the fermentation. One week later, when fermentation has finished, you can bottle your beer. This takes about an hour. You then need to store your beer for a further 2 to 4 weeks (depending on type) to allow it to mature ready for drinking.



**BREW DAY** Mashing, lautering and boiling the hops (about 4 hours)

BOTTLING DAY Bottling your beer (about an hour)

CHEERS!

With our Brewbox, you can brew 4 litres of beer (about twelve 0.33-litre bottles) at a time. And the next time you want to brew, you'll be able to choose from one of our wide range of refill packs.

This is what you will need to supply from your own kitchen: 1 stock pot (8 to 10 litres), 1 second large pot, saucepan or bucket (alternatively, two smaller saucepans), 1 measuring jug, 1 wooden spoon, 1 coarse-meshed sieve, 1 fine-meshed tea sieve, 1 funnel, tap water.

You will need the following items on bottling day (1 week later): sugar, empty bottles.

Beer consists of 90% water, which is why good quality water is important. Chances are, the water om your tap is fine for brewing. However, if you normally filter your drinking water, it might be a od idea to filter the water you use for brewing. Alternatively, use a still mineral water with a low neral content from the supermarket.



- Heat 4 litres of water in your stock pot to 72 °C. Stir in the malt until the mixture is smooth and there are no lumps. This step is known as "mashing-in".
- When you add the malt, the temperature will drop by a few degrees; this is what you want. Now maintain the temperature between 65 and 69 °C for 60 minutes.

Hint: Stir the mixture now and again so that the heat is evenly distributed and nothing burns. Don't worry if you heat the mixture too quickly and overshoot the recommended temperature range. Simply remove the pot from the heat, wait for the temperature to fall in range and then continue as described.

- Once the 60 minutes are up, raise the temperature to 78°C and remove the pot from the stove. This step is known as "mashing-out".

- We now need to separate the malt and the liquid. The aim here is to wash as much of the residual sugar out of the malt as possible.

- Rest the sieve over pot no. 2 (or bucket). Use the wooden spoon to scoop the malt out of the mash and into the strainer (don't be overly fussy here; just make sure that most of the malt goes into the sieve).

- The malt will now form a natural filter in the sieve. Slowly pour the liquid from pot no. 1 over the malt. A measuring jug works best.

- After the liquid has drained through the malt, clean pot no. 1 and use it to heat another **3 litres** of water - the "sparge" - to 78°C. As soon as the liquid has stopped draining from the malt, use your measuring jug to pour the sparge over the malt.

- This completes the first round of lautering. If there is still too much residual sugar in the malt, however, place the sieve over pot no. 1 and pour the liquid over the malt once again. The malt has now served its purpose and is no longer needed. The liquid that you have strained is known as the "wort", and this is what will later become beer.



In the next step we will be "lautering", or separating the malt from the liquid and washing out the residual sugar from the malt.

- What you will need from your brewing kit: nothing
- Kitchen utensils needed: 1 large coarse sieve, the stock pot already in use, 1 second large pot or bucket for collecting the liquid (alternatively, 2 small sauce pans), 1 wooden spoon, 1 measuring jug

Hint: Try tasting some of the malt. Do you find it sweet? If so, vour mash has been successful!





ose of the spent grain: ı will find some recipe erbrauer.de/treberrezep



The next step is to add the hops to the wort. Hops give the beer its tangy, bitter flavour.

## Time: 60 min.

What you will need from your brewing kit: hops, 3-scoop measuring scale Kitchen utensils needed: the stock pot with the wort, a sink or washbasin, tap water, ice cubes or coolpacks (if available)

Vithout adding hops, the characteristically bitter, refreshing taste would not be possible. The rlier you add hops to the boil, the bitterer the beer will be. The later you leave it, the "hoppier' ne beer will taste.



- Bring the wort to the boil with the lid off. The wort should simmer only, that is, keep it just slightly above boiling point. Boil for 60 minutes.

- Add hops 10 minutes after reaching boiling-point.

- Wait until the temperature drops below 25°C. To speed up cooling, replenish the cooling water and stir the wort in the pan every once in a while. While the wort is cooling, you have time to sterilise your utensils ready for the fermentation process. From now on, everything that comes into contact with the wort must be sterile!

This is how to sterilise your brewing utensils. Add 2-3 litres of lukewarm water into an adequately sized container (a bowl, a bucket or a pot). Take the measuring scale and fill the largest scoop with sterilising powder. Add one measure of powder per litre of water and let the utensils soak for at least 1 minute in the sterilising solution.

This is where the yeast comes into the picture. When yeast is added to the wort, it reacts with the sugar and converts it into alcohol and carbon dioxide. The yeast is in fact the magic ingredient in our beer!

Time: 30 min + 1 week for fermentation What you will need from your Brewbox: sterilising powder, fermentation bottle, rubber stopper, airlock, yeast Kitchen utensils needed: 1 container for the sterilising solution (a pot or bowl of at least 3 litres capacity), 1 funnel. 1 fine-meshed tea sieve



- When the boil is finished, we want to cool the wort down as quickly as possible so that we can add the yeast. Just before the 60 minutes are up, fill your sink with cold water (ice cubes or coolpacks will help). As soon as the boil is finished, place the brew pot in the water.

- As the wort cools down, measure its temperature occasionally with the well cleaned thermometer



- Sterilise the funnel, the stopper and the airlock. To sterilise the fermentation bottle, add some sterilising solution, seal the opening with the palm of your hand, and shake the contents vigorously. Then give it a quick rinse using tap water.

- Insert the funnel into the fermentation bottle. Place the tea sieve over the funnel so that the majority of the hop particles are filtered out of the wort. To ensure a good flow whilst filtering, the sieve should be rinsed clean as necessary. Fill the bottle up to the curve of the neck, about 6-7cm below the handle. If you have too much wort, simply pour the excess away. If you have too little, this means that too much water evaporated during the boil. Just top the bottle up with some more water. - It is important that you fill the bottle as described. That way, you will have the right amount of beer for twelve 0.33-litre bottles (or eight 0.5-litre bottles) and you will also achieve the desired alcohol content.

- It is now time to fetch our friend, the yeast. Open the sachet of veast and toss the content into the fermentation

- Shake the fermentation bottle vigorously for a few seconds to mix the yeast with the wort and to introduceoxygen into he mixture.

- Pour some of the sterilising solution into the airlock and insert it into the sterilised fermentation stopper Then insert both into the neck of the fermentation bottle. The airlock makes sure hat carbon dioxide can escape during the fermentation process and, just as importantly, that no air can enter the bottle. Now leave the bottle to stand in a dark place at room temperature (18-20°C is ideal) for at least a week (ideally for 10 or more days).



Over the next one or two days, the yeast will multiply rapidly and change the sugar into cohol. It will start bubbling in the airlock and foam will start to form on the wort. This is all uite normal. It is important that the yeast is allowed to get on with its job undisturbed for at east a week (even if fermentation appears to have finished before then). The beer can happily stay in the sealed fermentation bottle for up to three weeks before you bottle it.

- While the beer is fermenting, you should start getting your bottles together. Bottles with swing stopper closures are suitable (e.g. Grolsch, Flensburger Pilsener, etc.). You can, of course, also collect bottles that come with crown caps, but you will then need a crown capper and crown caps to seal your bottled beer (we sell them in our shop here: besserbrauer.de/shop). You will need max. twelve 0.33-litre bottles or eight 0.5-litre bottles.



In this step, we bottle the ,,young beer" and leave it to mature. Another pair of hands can be very useful here.

Time: 60 min + 3 weeks ageing (conditioning).

What you will need from your brewing kit: sterilising powder, beer pump and tube, tube clamp, 3-scoop measuring scale

Kitchen utensils needed: 1 container for the sterilising solution (a pot or bowl with at least 3 litres capacity), 1 funnel, sugar, 12 empty 0.33l bottles (or 8 x 0.5l bottles), tap water

- First we will make sure that the yeast produces carbon dioxide during the bottle ageing process. To do this, we put a small amount of sugar into the bottles. At this point, the sugar will not add sweetness; it will just ensure the liveliness of the beer.

- If you are using 0.33l bottles, fill the smallest scoop of the measuring scale with sugar. For 0.5-litre bottles, use the middle-sized scoop and for the 0.75-litre bottles, use the largest scoop. Put a level measure of sugar in each of your sterilised bottles.

- Place the fermentation bottle with your beer on your kitchen worktop or table (be carefully not to disturb the yeast lying at the bottom) and the empty beer bottles somewhere below them - on the floor, for example.



- Put the tube clamp on the bottom end.

- Sterilise the beer pump and the tubing by holding the lower part of the pump in some sterilising



bottles.

- That's it! Once you have your beer in bottles, seal them with sterile swing stoppers or crown caps.

- Store the beer upright in a dark place at room temperature (18-20°C is ideal) for three weeks to mature. During this time, the remainder of the yeast will turn the sugar to carbon dioxide and the beer will develop its authentic flavour.

solution and pulling and pushing the top section several times vigorously to pump the sterilising solution through the tube. Then do the same thing with some clean water and empty the tube.



- Put the end of the tube into the first empty beer bottle (preferably with the help of another person). Make sure that the tube clamp is open.

- Push the top section of the beer pump several times vigorously in and out to start pumping the beer through the tube and into the beer bottle. Once again, try not to disturb the yeast at the bottom of the fermentation bottle. Also try to avoid excessive bubbling, because you don't want too much oxygen to get into your beer at this stage. It helps if you tilt the bottles slightly when filling.

- Because the fermentation bottle is higher than the beer bottles, the siphon effect will cause the beer to flow automatically through the tube and into the bottles.

Don't fill any more than 90% so that the carbon dioxide has some space to build up pressure. If ou fill the bottles completely, they could explode.

- As soon as you have filled the first bottle of beer up to the 90% mark, shut off the flow with the tube clamp and move on to the other

- Hold the fermentation bottle at a slight angle when you have drained nearly all the beer from the yeast.



- After three weeks, place the bottles upright in the fridge. Leave them there for at least 2 days in order to stop the second fermentation and allow the yeast to settle. The beer will keep for at least 12 weeks in the fridge (depending on how sterile your utensils were).



- Congratulations. Your own beer is ready! Time to celebrate your achievement with a cool bottle of home brew and a few friends (if you feel like sharing). Cheers!

We are not big fans of blank beer bottles. If you would like to create your own labels for your bee vou can download some here: besserbrauer.de/etiketten

# HELLES FACTS FOR THE CONNOISSEUR

Optimum drinking temperature: 8-12°C (remove from the fridge 15 to 30 minutes before drinking)

Recommended glasses: Pint glass, tulip or pilsner glass

Goes really well with: Light salads, sandwiches, grilled chicken, spring rolls, pates and terrines

How happy are you with your beer? Send your feedback to hallo@besserbrauer.de!

Plan your next brew: besserbrauer.de/nachfuellpakete MEHR INFOS, SHOP & NACHFÜLLPACKS:

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