

Coopers DIY Beer Kit Instructions

You're about to embark on the easiest and most rewarding DIY project ever: Cooper's DIY Beer.

Everything you need to make your own great tasting beer is all in the Coopers DIY Beer Kit box.

The kit contains:

- Fermenting Vessel & Tap
- Durable Hydrometer & Measuring Flask
- Instructional DVD ROM
- Brewers Log Card Instruction Card
- Erasable Marker
- Mixing Spoon
- 30 x 740ml PET Bottles & Caps
- Adhesive Thermometer Strip
- Bottling Valve
- Lager Beer Concentrate
- Brew Enhancer 1
- Carbonation Drops

Preparation

- Check ingredient best before dates, the fresher the better.
- Only use water that's free of chlorine odour and is acceptable for drinking.
- If you don't plan to make the beer kit up straight away, store the yeast in the fridge to keep it fresh.

Cleaning

- The first time you use your kit, you can just rinse all equipment in hot water.
- Disassemble the tap when you rinse
- Once everything is clean, connect your tap, lubricate the silicon overlay at the rear of the tap by wetting it with water before you insert it into the fermenting vessel.
- Stick on your thermometer strip by peeling back the adhesive backing and placing it on the flat section on the front right hand side of the fermenting vessel.
- You are ready to start brewing.

Hint: The most common cause for brews to fail is contamination. Therefore, all equipment that comes in contact with the brew must be cleaned to remove all visible soiling. For future brews we recommended that you sanitise all your brewing equipment before each brew with either the Coopers Sanitiser or a non-scented household bleach.

- *Only use a soft cloth that won't scratch the fermenting vessel.*
- *Make sure the tap is removed, disassembled and cleaned each brew.*
- *Lubricate the tap each time you insert into the fermenting vessel.*

To sanitise using Coopers Sanitiser:

1. Dissolve 4 capfuls of Coopers Sanitiser in the fermenting tub with a litre of hot water.
2. Place all equipment in the fermenting tub, fill to the brim with cold water and let soak overnight (or at least 2 hours).
3. Drain the fermenting tub through the tap and rinse all equipment with hot water.
4. The fermenting tub lid need only be cleaned then rinsed with hot water.

To sanitise using Unscented Household Bleach:

1. Add ¼ cup of unscented household bleach to the fermenting tub.
2. Place all equipment in the fermenting tub, fill with cool water and let soak for at least 30mins.
3. Rinse out with hot water to remove all traces of chlorine smell.
4. The fermenting tub lid need only be cleaned then rinsed with hot water.

Mix

- Pour dry ingredients into the fermenting vessel and add 2 litres of water to dissolve
- Open the brew can with a can opener.
- Pour it into the fermenting vessel and mix thoroughly.
- You can pour the hot water into the can to remove the remaining contents.
- To get the brew temperature in a 21-27°C range, top up to the 23 litre mark with cold or hot water as required.
- Try to get as close as possible to the lower end of the recommended temperature range.

Hint: Getting the temperature right is important, so you might want to do a wet run without ingredients first.

- Using only water fill the fermenter to 20 litres.
- Then fill to the 23 litre mark varying the ratio of hot and cold water until you achieve the required result.

Adding Yeast

Even if the brew temperature is outside of the 21°C - 27°C range, still add the yeast anyway as it is important to allow the yeast to start working as soon as possible.

- Fit the Krausen Kollar by slipping it inside the Fermenting Vessel.
- Sprinkle the dry yeast evenly over the surface.
- Fit the lid to the Krausen Kollar with the lid clips.

Measure Specific Gravity (SG)

The hydrometer is a calibrated device for measuring the density of a fluid relative to water, known as the Specific Gravity (SG). When floating, the SG is read at the point where the graduated scale cuts the fluid level. Specific Gravity figures recorded at the beginning and end of fermentation are used to calculate approximate alcohol content see formula at the end of these instructions.

Measure the original gravity (OG) of your brew with your Hydrometer:

- Remove the hydrometer from the clear plastic measuring tube.
- Draw a sample of the brew from the tap to half fill the measuring tube and then discard this first sample.
- Draw another sample with enough brew to float the hydrometer.
- Read the gravity scale at the meniscus of the brew (where the beer meets the hydrometer stem), and record.
- While the brew ferments try to keep the brew at the lower end of recommended temperature range, which is 21°C-27°C.

Hint: Some ways you can do this include:

- *storing the fermenter inside at ambient temperature*
- *placing it in an insulated cabinet*
- *wrapping it in a blanket*
- *purchasing a heat belt or placing the fermenter in a tub/sink of cool water*

Fermentation

- After 12 to 24 hours, you'll know that fermentation is underway because you'll see foam beginning to occur and the brew becoming cloudy.
- Ensure the temperature is consistent and leave it for a few days.
- Other signs of fermentation are
 - Foaming
 - Cloudiness in the brew
 - A sample drawn from the tap is fizzy
 - The density has dropped to less than the OG
- Once the foam has subsided (usually around days 3 to 5), remove the Krausen Kollar for cleaning, and replace the lid. It's fine to put your krausen kollar in the dishwasher.

Testing

- On day 6 measure the specific gravity of your brew with your hydrometer.
- Draw another sample with enough brew to float the hydrometer.
- Read the gravity scale at the meniscus of the brew (where the brew meets the hydrometer stem).
- If your sample is too foamy, you may need to de-gas it.
- Test the specific gravity each day.
- Final gravity (FG) is reached once specific gravity is stable 2 days in a row.
- When your SG is stable two days in a row the brew is ready to bottle.

Hint: Taste Test your brew

Try your brew to check if it tastes and smells okay (draw a sample in a glass from the tap). If so, you can proceed to bottling.

Hint: De-gassing a sample

To get an accurate reading, dislodge bubbles clinging to the hydrometer by plunging the floating hydrometer up and down in a piston action.

Hint: Final Gravity:

Please note that FG will vary from brew to brew so it's important to ensure that the FG is stable over two days prior to bottling.

Bottling

- Fit your bottling valve, by slipping it inside the tap.
- Place a container under the bottling valve to catch any drips.
- Switch the tap on full filling the bottling valve.
- Place the bottle over the bottling valve until the bottom of the bottling valve touches the bottle and starts to fill the bottle.
- Fill each PET bottle to the brim. The flow will stop once the bottle is lowered.
- Once your bottles are filled add two carbonation drops for every 740-750 ml bottle, this equates to priming your bottles at the rate of 8 grams per litre.
- Screw the cap onto the bottle ensuring they are screwed on tight.
- Store the bottles away from direct sunlight at or above 18 degrees Celsius for at least 2 weeks to allow the secondary fermentation to take place.

Hint: Maturing your beer. Different beer styles require appropriate maturation in the bottle to suit your personal preference. Your beer will taste great after two weeks, however the aroma, flavour and clarity should improve with age. Maturing the beer will also help to produce a finer head (smaller bubbles), which helps to produce a more creamy and persistent head.

Enjoy

- After a couple of weeks check the PET bottles feel firm, if so, they can be chilled as desired for consumption.
- We recommend serving your beer from a glass.
- For ease of cleaning, rinse out PET bottles while the contents are still moist.
- You can calculate approximate alcohol content using the following formula
[Original Gravity (OG) - Final Gravity (FG)] / 7.46 + 0.5* = ABV %
* an extra 0.5 is added due to fermentation in the bottle

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