

COMPREHENSIVE INSTRUCTIONS FOR BREW KITS

Welcome to the wonderful world of brewing healthier, better tasting beers! For a movie version of these instructions, see: http://www.youtube.com/watch?v=i05ye1GnuYo

Brewing Preparations:

Choose an appropriate place to brew, somewhere clean. Avoid places where bacteria thrive like kitchens, toilets and air-conditioned rooms.

Ensure the tap on your fermenter is tightened sufficiently so that the spout is facing downwards and the on/off handle can be turned without turning the entire tap.

If your fermenter is dirty, you'll need to follow the steps in "Fermenter Cleaning." If the fermenter is clean, use boiling water to rinse, then discard. Rinse ALL other equipment that comes in contract with the brew with this Fermenter Keg & Line Cleaner (FK&LC) and boiling water. Rinse thoroughly with hot water from your kettle water afterwards. A further step can be to sanitise with a phosphoric acid and iodine solution (iodophor) followed by a good rinse.



Wort Preparation: (Wort is unfermented beer).



Add the dry ingredients and combine with brew paddle. Add 2-4 litres of boiling filtered water into the fermenter and stir until everything is dissolved.

Open the can from the bottom with your sanitised can opener. Add can and rinse into your fermenter with boiling filtered water.



Fill the fermenter up 22.5 litres (maximum) with filtered water from a great height to cause splashing and maximum aeration of the wort. Yeast need oxygen to start quickly and finish the beer clean, clear and properly fermented.

Stir vigorously with your paddle. The mix of hot and cold should give a final temperature of $37 - 40^{\circ}$ C. This is ideal for pitching 514 yeast. Avoid adding the yeast at a temperature above 40° C as this can kill your yeast or lead to undesirable flavours. When you pitch the yeast, stir it in thoroughly.

Fermentation:



Fit the lid to the fermenter ensuring a seal (not too tight). Fit airlock and fill with enough water to ensure air can't pass through. Fermentation should start quickly and after 8 hours, bubbles should be passing through the airlock. If not, the lid may not be on tight enough. The fermentation may not have started due to –

- a) The wort being too hot for the yeast and it has killed it pitch in another yeast at the correct temperature
- b) The wort is too cold for the yeast to get working. This only happens below 15°C.

NB: Don't obsess about the airlock. Activity in the airlock means something is fermenting. No activity in the airlock may be due to many different reasons.

Fermentation Time: At a constant temperature of $22 - 28^{\circ}$ C, fermentation will take 7 - 10 days. If you are kegging leave it longer for less haze. Improved brews using extra malt or a Goodies Pack will also take slightly longer.

Bottling:

You will require 30 x 750mL bottles (brown preferably, green if you must, <u>never</u> clear bottles). Ensure that they are cleaned with FK&LC and rinsed thoroughly. Prior to filling put a teaspoon of sugar into each bottle. The sugar will react with the yeast in the beer to start a secondary fermentation which carbonates the beer to give it its bubbles and head. Too much sugar will make the beer too gassy or cause the bottles to explode. Use

1 teaspoon for 750mL bottles and ½ teaspoon for 375mL bottles. Clean the outlet of the tap and discard the first ½ litre that comes out of the fermenter. Fill the bottles up with the beer using the "Little Bottler" which makes this operation much easier. Rest a cap on each then go back to the first and cap each bottle ensuring the bottle is well sealed. Agitate the bottle after sealing to help dissolve the sugar.



Storage:

Store the bottles upright so that the sediment from the secondary fermentation sits in the bottom. Your beer will be gassed up enough for drinking after two weeks; HOWEVER, it will improve if left for longer (6-8 weeks). Brew more than you drink, so that eventually you aren't drinking anything under 3 months in the bottle. Always store away from bright light.

Drinking:

Ensure your glass is free of grease or detergent residue. Grease will cause the beer to lose its head. Beer glasses should be washed in very hot water and left to drain dry and then chilled.

Fermenter Cleaning:

Hose out your fermenter to remove the sediment from the bottom of the fermenter immediately after bottling. Fill your fermenter to the top with water and add 100mL of FK&LC. Pour a little out through the tap and allow to sit for 8 hours. Empty out the solution through the tap and rinse thoroughly. Now your fermenter is ready for another brew.

Record Keeping

Go for it and write each brew up in a notebook. Include a name, ingredients, process, date brewed, time taken and tasting notes.

Cheers