



INSTRUCTIONS OVERVIEW

Thank you for purchasing this recipe kit from The Malt Miller!

We recommend you unpack your kit as soon as you receive it, store any yeast and hops in the fridge until the day you brew.

You'll need to refer to the recipe included with your kit alongside this guide. A complete and comprehensive guide to All Grain Brewing can be found by scanning the QR code to the side, which is useful for those that are new to the hobby or would like to top up their knowledge



NEW BREWERS

If this is your first time brewing an All Grain Recipe Kit, please read the steps below. It is important to note: The temperature and volumes of liquor (water) required to brew depend on the particular brewing system used. As it would be impossible to give exact liquor volumes for every brewing system commercially available, we have given guideline calculations, scan the QR code to the right to use our free water calculations tool so you can work out the exact amount of water you need for your method of all-grain brewing or learn more about how to calculate water volumes. The first few batches on a new system are the chance to make copious notes, corrections can then be made in the future.



Understanding
Water Volumes



Water Volumes
Calculator

COLLECT AND TREAT YOUR LIQUOR

Collect the total amount of brewing liquor listed in your recipe (mash liquor + sparge liquor) in a hot liquor tank or other vessel. We recommend tap water is treated with sodium metabisulphite (Campden powder) to remove any chlorine.

Your recipe may also include a water profile for improved flavour, this is an optional step for brewers confident with water treatment. Follow this QR code to learn more about water treatment.



BREW DAY PREPARATION

Make sure your equipment is clean and ready to use, your recipe will include multiple steps listed in the MASH section. Heat your brewing liquor to the temperature for the first step and take your yeast out of the fridge, so it gently returns to room temperature.



MASHING

Add the mash liquor to your brewing system and make sure it is at the temperature for the first step. **Depending on the temperature of the grain and brewing equipment, the temperature of the mash liquor will drop when adding the grain. It is a good idea to increase the liquor temperature by a couple of degrees to account for this.**

Open the bag(s) of grain from your kit and add to the liquor a little at a time, stirring as you go. Once all the grain is added, stir thoroughly to make sure there are no lumps. This is your **mash**. If your brewing system includes a recirculation system, start this now - you should avoid stirring the mash after this point. Make sure to set a timer or use a brewing app to note and track the time of your mash. Each mash step in the recipe has a time given alongside the temperature, when this time is complete, heat the mash to the temperature for the next step. Start timing the next step when it reaches the new temperature – do not count the time it takes to heat between steps. During the mash, heat your sparge water to 75-80°C.

SPARGING

When you have completed all the mash steps, drain the liquid from the mash into your boiling vessel (for all-in-one brewing systems, lift the grain basket to drain into the vessel below). Once fully drained, begin gently distributing your sparge liquor across the mash – this is called **sparging**. Keep the liquid level a few centimetres above the surface, pausing if necessary. Continue sparging until you have used all your sparge liquor.

BOILING

Turn on the heat to your boiling vessel and bring the wort (liquid) collected to the boil, some systems will automatically heat while you sparge.

Measure out the hop additions listed in your recipe. Your hops are bagged by variety rather than when they are to be added. If you have any hops listed as **first wort hop**, add these now - before the boil begins.

Set a countdown timer for the total boil time listed in your recipe. Start this timer when the wort reaches a steady, rolling boil. Add any hops or other additions including ProMix with a time noted when your countdown timer reaches that time: for example, a “15 min” addition should be added when your timer shows 15 minutes remaining **from the end of boil**.

WHIRLPOOL AND CHILLING

Turn off the heat when your timer reaches zero and add any hops or additions listed at “0 mins” now. If you have hops listed as “flameout”, let the wort cool to 85°C before adding these. If you have hops listed as “whirlpool”, let the wort cool to the temperature listed. Make your additions and give the wort a strong stir to create a current, then wait for the time listed, you don’t need to stir again.

When you have completed all the additions listed in the BOIL section of your recipe, begin chilling the wort to the **Yeast pitching temperature** given in the FERMENTATION section.

From this point on, be very careful to make sure anything that touches the wort has been sanitised. Wort chillers can be sanitised with hot wort (preferably >85°C). For other equipment, spray or immerse in no-rinse sanitiser.

TRANSFER

When the wort reaches the **Yeast pitching temperature**, transfer to a fully sanitised fermenter.

Take a sample and measure the gravity with a hydrometer, also note the volume of wort in the fermenter. The lid of your recipe box includes a push-out notepad to record these details.

Open the yeast and sprinkle directly onto the surface of the wort, close the fermenter and leave the yeast to do its magic. Thoroughly clean your brewing equipment, and congratulate yourself on a job well done!