

## PREPARING EQUIPMENT

Before starting, thoroughly clean and sterilise all equipment that will come into contact with your brew (fermentation vessel & lid, mixing spoon etc). For cleaning thoroughly, we recommend using Young's Steriliser. It is important to rinse well after sterilisation using clean water to avoid tainting your beer.

#### **SETTING UP YOUR BREW**

1. Cut off the top of the malt pouch and squeeze out the liquid malt extract into your fermentation vessel, Be sure to roll the pouch and squeeze out as much of the extract as possible. If your kit contains oak chips add now. Add 3 litres of boiled water to your fermentation vessel and mix.

\* To raise start temperature use 4 litres of boiling water for Saison.

**Important note:** Always keep your fermentation vessel covered as much as possible to minimise risk of contamination from airborne spoilage micro organisms.

**2.** Stir to dissolve the liquid malt extract then add the contents of the brewing sugar pack before continuing to stir until fully dissolved.

**3. For Mocha Porter and Red India Ale top up your vessel to 17.5 litres** all other beers top up to 23 litres using cold tap water and stir well to ensure your wort is thoroughly and consistently mixed.

**4.** Next, stir your wort vigorously for approximately 2 minutes to oxygenate your wort. Stirring should be vigorous enough to produce significant foaming or bubbling at the liquid surface.

**Important note:** In order to ensure a rapid start and healthy, reliable fermentation, it is essential to ensure there is plenty of oxygen available in the wort for the yeast to utilise for growth. Failure to thoroughly oxygenate your wort could result in prolonged fermentation times.

**5.** Using a thermometer, check the temperature of your wort. You may also find it useful to measure, and take a Specific Gravity (S.G) reading for future reference.

6. Once the liquid temperature is below 25 °C and your wort has been thoroughly oxygenated, sprinkle the contents of the yeast sachet onto the liquid surface before stirring-in gently. If your wort is too warm, replace the lid and wait, checking the temperature periodically until the required temperature is achieved before adding the yeast.

## \* Above 25 °C is desirable for Saison

**7.** Fasten down the lid of your fermentation vessel and fit an airlock and half-fill the airlock with sterilised (i.e. boiled and cooled) water.

**8.** Leave your brew to ferment at between 20 - 24 °C. Make sure to position your brew on a surface which can be easily cleaned in the event of any foaming-over during fermentation. Always place your brews out of direct sunlight.

\* Ambient temperature range 20-32 °C for Saison and the warmer the better. Greater than 24 °C will not impair quality of Saison (it will actually improve yeast character)

**Important note:** Good temperature control is essential in ensuring optimum beer quality. Fermenting below 20 °C will result in prolonged fermentation and increased risk of infection. Fermenting above 24 °C will impair the quality of your beer.

9. After 3-4 days, check that the airlock on your fermentation vessel is bubbling regularly. If it is not, adjust the airlock to ensure an air-tight seal. Monitoring the bubbling of the airlock is a useful indicator of fermentation rate and when this stops it indicates your fermentation is nearing completion. As a guide, complete fermentation should be expected within 10 days for the Amber Ale, Saison, Oaked Rum Ale, Mocha Porter, Red India Ale and within 15 days for the Pale Ale & IPA. Fermentation times will vary depending upon fermentation temperatures.

10. Continue to monitor airlock activity until it slows to <1 bubble/30 seconds then check the S.G. of your beer. Refer to the table below for guidance on when to add your hops. If the gravity is too high, leave your beer for a further 2 days before checking again.

11. When your beer is ready for hops to be added, simply pour the sachet contents onto the surface of the beer and replace the lid. DO NOT STIR YOUR BEER. The hops will break up and distribute on their own.

\* No hops to be added in American Oaked Rum Ale & American Mocha Porter.

#### **ADDING THE HOPS**

This kit contains hop pellets to be added towards or at the end of fermentation; a technique known as 'dry hopping' commonly used in craft brewing to achieve highly aromatic, hoppy beer styles.

Hops contain large quantities of alpha-acids which aromatise your beer. It is important not to add the hops too early as CO2 produced during fermentation will drive-off the volatile aromas, significantly reducing the impact of the finished beer.

We recommend dry hopping as late as 2-3 days before bottling or barrelling to preserve the delicate aromas and maximise your enjoyment of this beer. Hops can even be added once fermentation has stopped completely.

12. 2-3 days after your hop addition, take a further Specific Gravity reading on your beer. If the gravity has not moved any further then you can proceed to bottle or barrel your beer. If the gravity has moved even 1 point, leave for a further 2 days before checking again. Refer to the table below for guidance on when to bottle/barrel your beer:

Beer kit / style	Hop addition guide	
American Pale Ale	Add hops at S.G. of	Remember! The hops
American IPA	1.010 or below	can be added as late as 2 days before bottling. If in doubt add later rather than earlier
American Amber Ale	Add hops at S.G. of 1.015 or below	
New World Saison	Add hops at S.G. of 1.008 or below	
Red India Ale	Add hops at S.G. of 1.013 or below	
Beer kit / style Guidance on required final S.G.		
American Pale Ale	Below 1.008	These values are provided as a guide only. Always ensure S.G. stays the same over a minimum 48hr period.
American IPA	Below 1.007	
American Amber Ale	Below 1.013	
New World Saison	Below 1.006	
American Oaked Rum	Below 1.008	
American Mocha Porter	Below 1.010	
Red India Ale	Below 1.010	

**Important note:** NEVER bottle your beer until fermentation is fully complete! Always make sure the Specific Gravity of your beer remains the same over a minimum 48hr period before bottling.

13. Once a stable gravity has been achieved you are now ready to use your priming sugar.

# **BOTTLING AND/OR BARRELING YOUR BEER**

14. If bottling syphon beer into another sterilised vessel, then dissolve your primary sugar by stirring the brew. Once dissolved you can now syphon into your bottles. This method will guarantee an even spread in each bottle. If barrelling, add your priming sugar directly into the barrel then syphon beer directly from your bucket.

**Important note:** Always use high quality beer bottles. Check glass bottles for faults such as cracks or chips before use, rejecting any imperfect bottles. If using plastic bottles, always ensure appropriate pressure-resistant PET bottles are used.

### **STORING & MATURING YOUR BEER**

Store your beer in a warm place for 2 week before transferring to a cool, dark place to clear and mature. Your beer can be consumed once clear, but optimum quality and conditioning is achieved after 1 month. These aromatic, hoppy beers are best enjoyed within 3-4 months of bottling but should remain in good condition for slightly longer if stored in a cool dark place.

## SERVING YOUR BEER

Ideally served cool at between 8-12 °C.For bottled beers, carefully pour off the beer into a pint glass all in one go, leaving the sediment behind in the bottle. Best results can be achieved pouring very slowly into a chilled glass. These beer styles can be served in a traditional English pint or shaker glass. Alternatively / for optimum aroma appreciation, serve in a tulip style glass.

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