

PLEASE NOTE: WE RECOMMEND USING A 20 L (5.3 US GAL) COOKING POT TO MAKE THIS BREW.

BREWING

Step 1: Steeping

- · Pour all of your grain into your grain bag.
- Tie a knot in the top of the grain bag to secure. Ensure you do not tie the bag too tight and there is enough room for the grain to move about inside the bag.
- · Add 11 L (2.9 US Gal) of water to your 20 L (5.3 US Gal) pot and place on the stovetop.
- Place your grain bag into your pot. Prod and poke the bag thoroughly to ensure the grain is evenly soaked through.
- Begin to heat your water to 65°C (149°F). Once you reach 65°C (149°F), set a timer for 30 minutes.
- During this 30 minutes, pay close attention to the temperature while stirring gently. You should aim to keep the temperature at approximately 65°C (149°F). Apply heat when necessary and turn off the heat if it starts to go higher.
- After 30 minutes, lift your bag out of the pot. Hold it above the pot and allow it to drain (this should take approximately 1 minute). Do not squeeze the bag. You may like to hang this up on something above the pot to leave to drain. Once the grain bag is drained (stops dripping), remove completely and discard grain.

Step 2: Boiling

- Pour your malt extract into the wort in the pot. Stir thoroughly to prevent this from scorching on the bottom while you add it.
- Heat and bring the liquid to the boil.
- As soon as the boil begins, add your bittering hops (see your recipe kit for bittering hops). Adding hops when the liquid is boiling can cause vigorous frothing. To reduce the risk of spilling you can take your pot off the heat as you add these.
- · Set a timer for 60 minutes and allow the wort to boil vigorously.
- · For the California Common only, after 30 minutes add the flavour hops (see recipe kit for flavour hops).
- · For the American Pale Ale only, after 50 minutes add your dextrose to the pot and stir well.
- Once the full 60 minutes is up, take your pot off the heat and add your aroma hops (see your recipe kit for aroma hops). Allow this to stand for 30 minutes.
- While boiling, clean and sanitise your fermenter, lid and mixing paddle with Mangrove Jack's Cold Water Cleaner Detergent and No Rinse Sanitiser ready for Step 4.

Step 3: Cooling

 Place your pot in the sink and run cold water around the outside of the pot to cool it down to approximately 50°C (122°F). Ice cubes can also be added to the water around the pot to speed up the cooling time.







Step 4: Fermenting

- Once at approximately 50°C (122°F), pour your beer into your sanitised fermenter bucket. There will be hop sludge (trub) at the bottom of the pot, try to avoid pouring this in.
- Top your beer up to 23 L (6 US Gal) with cold water.
- Stir well with your sanitised mixing paddle and check the temperature (making sure the thermometer probe has been sanitised). Once the temperature is below 26°C (79°F), rehydrate your yeast (see yeast datasheet or website for rehydration directions) and add this to the beer.
- Place the lid on your fermenter and seal fully. Push your airlock bung in the lid and half fill with water or some left over sanitiser solution. Allow your beer to ferment for 1 week.
- After 1 week, or when the airlock has stopped bubbling, check the Specific Gravity (SG) using a hydrometer. The SG is the level at which the wort comes up to on the hydrometer. If fermentation is complete, the SG should be lower than the gravities shown in the table below. Once fermentation is complete, proceed to the bottling stage below. If not, leave to ferment for a few days longer before checking the SG again.

BEER STYLE	EXPECTED FINAL SG
CALIFORNIA COMMON	1.015
LIBERTY GOLDEN ALE	1.015
AMERICAN PALE ALE	1.015

IMPORTANT WARNING: NEVER BOTTLE UNTIL FERMENTATION IS COMPLETE. THE ONLY WAY TO BE COMPLETELY SURE FERMENTATION HAS FINISHED IS BY SEEING EXACTLY THE SAME SG READING OVER TWO CONSECUTIVE DAYS.

Step 5: Bottling

- Clean and sterilise 30 x 750 ml PET or amber glass flip top bottles. If using glass, ensure that there are no cracks or imperfections.
- Add 2 Mangrove Jack's Carbonation Drops to each bottle.
- Place your fermenter on a raised surface. Use a clean and sterilised syphon to fill all your bottles leaving a 2.5 cm (1 ") gap from the top before securing the tops on the bottles.
- Allow bottles to sit somewhere warm for a week before transferring somewhere cooler for a final week.
- Once ready, chill before drinking!







