



**MANGROVE
JACK'S**

CRAFT SERIES

INSTRUCTIONS HELLES AND NZ PILSNER



1. Clean and sterilise your fermenter, airlock, lid and mixing paddle with Mangrove Jack's two part cleaner and steriliser system. Remember to fit your sediment reducer to your tap before sterilising.
2. Remove the yeast sachet from the dry compartment of the pouch and set aside for now.
3. Add 3 L (3 US qt) of boiling water to the fermenter, pour the liquid malt extract from the liquid compartment of your pouch into your sterilised fermenter and squeeze out remains. Add either 1 kg (2.2 lb) of dextrose brewing sugar, a Mangrove Jack's Pure Malt Enhancer 1.2 kg (2.6 lb) or Mangrove Jack's Brew Enhancer then stir until completely dissolved.
4. Top up to 23 L (6 US Gal) using cold tap water and stir well. Add the contents of the yeast sachet and stir to mix. Check liquid temperature is below 25°C (77°F), if not then stand the fermenter in a bath of icy water to cool it down.
5. Fit an airlock and grommet or bung to fermenter lid then secure lid to fermenter, making sure the seal is airtight. Half fill the airlock 'U' with boiled water to protect the brew during fermentation.
6. Leave to ferment at a constant warm temperature between 18 – 22°C (68 – 72°F). Cooler temperatures will extend fermentation time by several days; below 15°C (59°F) fermentation may stop altogether. Use a heat pad to avoid extreme cold temperatures but bear in mind that fermenting too warm will reduce quality.
7. After 4 days, check the Specific Gravity (SG) using a hydrometer. If the SG is 1.015 or below, add the hop pellet sachet but DO NOT STIR (the hops will break up and disperse naturally). If the SG is higher than 1.015, check again in 1 or 2 days until the SG is 1.015 or below before adding the hop pellets. Replace the lid and leave to continue fermenting with the hops. NOTE: Dry hopping can result in small hop particles in the finished beer. If this concerns you then you can dry hop in a hop bag. Just be aware, this may result in less hop flavour and aroma in the finished beer.

8. After a further 3 days (minimum of 7 days total), or when the airlock has stopped bubbling, check the SG again using a hydrometer. If fermentation is complete, the SG should be equal to or below the value shown for the beer style in the table below. If the SG has not yet reached the desired level, leave for a further 1-2 days before checking again. NOTE: The gravities below are based on using dextrose brewing sugar, and Mangrove Jack's Pure Malt Enhancer. If you use Mangrove Jack's Brew Enhancer, use the Pure Malt Enhancer as an approximate guide, your SG may be slightly higher.

Once fermentation is complete, proceed to bottle your beer. For best results, ensure a minimum of 2 days infusion time between hop additions and bottling.

BEER STYLE	EXPECTED SPECIFIC GRAVITY (SG)	
	(BASED ON DEXTROSE BREWING SUGAR)	(BASED ON MANGROVE JACK'S PURE MALT ENHANCER)
HELLES	1.007	1.014
NZ PILSNER	1.008	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 A 48 HOUR PERIOD.

9. Clean and sterilise bottles, bottling valve or syphon tube before use. Use Mangrove Jack's PET or amber glass flip top bottles. Reject any glass bottles which have the slightest chips, cracks or imperfections. **Don't use non reusable bottles.**
10. Fill your bottles leaving 5 cm (2 ") headspace (measure from the very top of the bottle). Before sealing bottles add Mangrove Jack's Carbonation Drops (this replaces priming sugar, 1 drop is equivalent to 0.5 tsp of sugar).
- Use 1 drop per 350 ml (12 US fl oz) Australian stubby bottle.
 - Use 2 drops per 750 ml (22 US fl oz) bottles.
 - Use 3 drops per 1.25 L (1.25 US qt) bottles.
 - Use 4 drops per 2 L (2 US qt) bottles.
11. Seal bottles and store in a warm place for at least 2 weeks before moving to a cool, dark place to clear for a further 7 days.
12. Your beer is ready to drink as soon as it's clear, but for a smoother beer leave somewhere cool and dark for an extra 2 weeks.