LAGER, PILSNER, WHEAT BEER



- 1. Clean and sterilise your fermenter, lid and mixing paddle with Mangrove Jack's two part cleaner and steriliser system.
- 2. Remove the yeast sachet from the dry compartment of your pouch and set aside for now. Pour the liquid malt extract from the wet compartment into your sterilised fermenter and squeeze out remains.
- 3. Add 3 L (3 US qt) of boiling water to the fermenter and either 1 kg (2.2 lb) of dextrose brewing sugar or a Mangrove Jack's Brew Enhancer or Pure Malt Enhancer then stir until completely dissolved.
- **4.** Top up to 23 L (6 US Gal) with cold tap water and stir well. Check liquid temperature is below 25°C (77°F). Add the contents of the beer yeast sachet and stir to mix.
- **5.** Fit an airlock and grommet to fermenter lid then secure lid to fermenter, making sure the seal is airtight. Half fill the airlock 'U' with cooled boiled water or steriliser to protect the brew during fermentation.
- **6.** Leave to ferment at a constant warm temperature for 7 days, for Premium Lager and Pilsner the ideal temperature is between 18 22°C (64 72°F) and for Wheat beer the ideal is between 20 25°C (68 77°F). Cooler temperatures will extend fermentation time by several days; below 15°C (59°F) fermentation will stop altogether. Use a heat pad to avoid extreme cold temperature. Fermenting above the recommended temperature will reduce the quality of your beer.
- 7. Wait for 7 days or until the airlock stops bubbling and then check the Specific Gravity (SG) using a hydrometer. If fermentation has finished the SG should be below the SG in the table, if not, then leave to ferment for a few days longer before checking SG 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.

BEER STYLE	EXPECTED SPECIFIC GRAVITY (SG)	
	(BASED ON DEXTROSE BREWING SUGAR)	(BASED ON MANGROVE JACK'S PURE MALT ENHANCER)
GOLDEN LAGER	1.007	1.014
PILSNER	1.008	1.015
BAVARIAN WHEAT	1.010	1.016

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.

- 8. Clean and sterilise bottles and bottling attachment or syphon before use. Use Mangrove Jack's plastic 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**.
- **9.** Syphon your beer into bottles leaving 5 cm (2 ") of headspace (measure from the very top of the bottle). Before sealing bottles add Mangrove Jack's Carbonation Drops (replaces priming sugar, one drop is equivalent to 0.5 tsp of sugar). See instructions on pack for recommended use.
- **10.** 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.

SERVING & STORAGE

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. Serve chilled. For extra clear beer, decant off into a serving jug before pouring.

