



# CHUR! RECIPE INSTRUCTIONS

**BREW STATS:** OG: 1.054 FG: 1.012 ABV: 5.5% IBU: 40 EBC: 15

**GRAINS:** **YEAST:** Mangrove Jack's West Coast M44 (2)

5 kg (11 lb) Weyermann Pale Ale Malt  
500 g (18.6 oz) Weyermann Pale Wheat Malt  
500 g (18.6 oz) Weyermann Munich II  
300 g (10.6 oz) Weyermann Carahell

**EXTRAS**  
10 g (0.35 oz) Irish Moss  
10 g (0.35 oz) Calcium Sulphate

**HOPS:** **NOTE:** THESE HOPS HAVE ALREADY BEEN MEASURED AND DIVIDED FOR EACH HOP ADDITION STAGE.

10 g (0.35 oz) Pacific Jade 25 g (0.9 oz) Motueka 50 g (1.8 oz) Nelson Sauvin	125 g (4.4 oz) NZ Cascade 40 g (1.4 oz) Riwaka
---	---

**PREPARATION:**  
Fill the boiler with 20.5 L (5.4 US Gal) of water and input a temperature of 67°C (153°F). Add the calcium sulphate and stir.

**MASHING:**  
When the water reaches 67°C (153°F), slowly add both grain packs, stirring slowly as you do to avoid dry clumps. Set the mash up as per the Grainfather instructions. Mash for 75 minutes at 67°C (153°F).

**MASH OUT:**  
After 75 minutes, ramp the temperature up to 75°C (167°F) for the mash out. Continue to recirculate the wort at 75°C (167°F) for 10 minutes.

**SPARGE:**  
Sparge with 12.5 L (3.3 US Gal) of water. This water has to be at 75°C (167°F).

**BOIL:**  
Use the below table with your hop packet instructions during the boil.

BOIL TIME	60 MINUTE HOP ADDITION	10 MINUTE HOP AND IRISH MOSS ADDITION	0 MINUTE HOP ADDITION
90 minutes	When the boil has 60 minutes left, add the 60 minute hop addition.	When the boil has 10 minutes left, add the 10 minute hop addition and the Irish Moss.	When the boil is over, switch off the boil control and add the 0 minute hop addition.

**COOLING:**  
After adding the 0 minute hop addition, let it rest for 15 minutes before chilling the wort using the Counter Flow Wort Chiller, as per instructions. As the cool wort collects into your fermenter, add both packets of Mangrove Jack's West Coast Yeast M44.

**FERMENTATION:**  
Ferment the beer at 19°C (66°F) for 7 - 10 days.  
Add the packet of dry hops 5 days into fermentation.  
Once fermentation is complete (when your SG has been stable for two consecutive days), bottle or keg the beer from the fermenter and enjoy.

**NEED HELP?** [www.mangrovejacks.com](http://www.mangrovejacks.com) [www.grainfather.com](http://www.grainfather.com) **CUSTOMER HELPLINES:**  
NZ: 0800 003 548  
AU: 1800 281 231  
US: 1888 689 0281