

# Batch #21 - 3 Dec 2021

**Brewfather**

www.brewfather.app

## EPA - 4.9%

### Classic English-Style Pale Ale

Brewer: Lisa Carruthers

Type: All Grain

IBU : 23 (Tinseth)  
 BU/GU : 0.48  
 Colour : 11 EBC  
 Carbonation : 2.4 CO2-vol

Pre-Boil Gravity : 1.045  
 Original Gravity : 1.048  
 Final Gravity : 1.011

### Fermentables (4.9 kg)

4.19 kg - No19 Floor Malted Maris Otter Malt...  
 405 g - Cara Gold Malt 12 EBC (8.3%)  
 300 g - Biscuit 44.5 EBC (6.1%)

### Hops (81 g)

30 min - 5 g - Magnum - 14.5% (6 IBU)  
 25 min - 5 g - Amarillo - 8.7% (3 IBU)  
 20 min - 5 g - Amarillo - 8.7% (3 IBU)  
 15 min - 5 g - Amarillo - 8.7% (3 IBU)  
 10 min - 5 g - Amarillo - 8.7% (2 IBU)  
 5 min - 5 g - Amarillo - 8.7% (1 IBU)

### Hop Stand

15 min hopstand @ 80 °C  
 15 min 80 °C - 51 g - Amarillo - 8.7% (5 IBU)

### Miscellaneous

Mash - 0.9 g - Calcium Chloride (CaCl2)  
 Mash - 0.2 g - Canning Salt (NaCl)  
 Mash - 1.2 g - Epsom Salt (MgSO4)  
 Mash - 0.6 g - Gypsum (CaSO4)  
 Mash - 6 ml - Lactic Acid 80%  
 Mash - 0.7 g - Magnesium Chloride (MgCl2)  
 Mash - 0.5 g - Sodium Metabisulfite (Na2S2O5)  
 Sparge - 0.59 g - Calcium Chloride (CaCl2)  
 Sparge - 0.13 g - Canning Salt (NaCl)  
 Sparge - 0.78 g - Epsom Salt (MgSO4)  
 Sparge - 0.39 g - Gypsum (CaSO4)  
 Sparge - 1.99 ml - Lactic Acid 80%  
 Sparge - 0.46 g - Magnesium Chloride (MgCl2)  
 Sparge - 0.33 g - Sodium Metabisulfite (Na2S2O5)

### Yeast

2 pkg - Mangrove Jack's Liberty Bell M36

### BrewZilla 35L - March 2020 - GASH (copy)

Batch Size : 23 L  
 Boil Size : 28.58 L  
 Post-Boil Vol : 27.08 L

Mash Water : 19.97 L  
 Sparge Water : 13.02 L  
 Sparge Water Temp : 76 °C  
 Boil Time : 30 min  
 Total Water : 32.99 L

**11 EBC**

Brewhouse Efficiency: 72%  
 Mash Efficiency: 81.4%

### Mash Profile

High fermentability plus mash out  
 69.4 °C - Strike Temp  
 65 °C - 60 min - Temperature  
 75 °C - 10 min - Mash Out

### Fermentation Profile

Ale  
 20 °C - 14 days - Primary

### Water Profile

MARKET WEIGHTON 2019 (Pale Ale)  
 Ca 122 Mg 15 Na 25 Cl 69 SO 144

SO/Cl ratio: 2.1  
 Mash pH: 5.22  
 Sparge pH: 5.7

### Measurements

Mash pH: 5.3  
 Boil Volume: 30  
 Pre-Boil Gravity: 1.043  
 Post-Boil Kettle Volume: 27.5  
 Original Gravity: 1.045  
 Fermenter Top-Up:  
 Fermenter Volume: 21.5  
 Final Gravity:  
 Bottling Volume:

### Batch Log

Date	Event
3 December 2021	Brew Date
3 December 2021	Fermentation Start
3 December 2021 12:58	Status: Brewing

# Batch #21 - 3 Dec 2021

Batch Log	
3 December 2021 17:38	Status: Fermenting
17 December 2021	Bottling Date