

Courage Best Bitter (clone) - 3.9%

Best Bitter

Author: Sam Hesford

Type: All Grain

IBU : 31 (Tinseth)
 BU/GU : 0.77
 Colour : 30 EBC
 Carbonation : 2.3 CO2-vol

Pre-Boil Gravity : 1.025
 Original Gravity : 1.040
 Final Gravity : 1.010

Fermentables (1.01 kg)

885 g - Pale Ale Finest Maris Otter 5 EBC (88%)
 56 g - Crystal Dark 270 EBC (5.6%)
 53 g - 10 min - Boil - Cane (Beet) Sugar 0 EB...
 12 g - Black Malt (Simpsons) 1665 EBC (1.2%)

Hops (9 g)

60 min - 4.6 g - Target - 11% (28 IBU)
 5 min - 4.4 g - Styrian Goldings - 5.4% (3 IBU)

Miscellaneous

Mash - 0.49 g - Epsom Salt (MgSO4)
 ^ Lot # /2119000091
 ^ Brouwstore (NL) 055.027.7
 Mash - 1.41 g - Gypsum (CaSO4)
 ^ The Malt Miller (UK) CHE-03-004
 Mash - 0.3 ml - Lactic Acid 80% 80%
 ^ Lot # 20200213
 ^ Brouwstore (NL) 003.002.3
 Sparge - 1.23 ml - Lactic Acid 80% 80%
 ^ Lot # 20200213
 ^ Brouwstore (NL) 003.002.3

Yeast

10.5 ml - White Labs London Ale WLP013

01 Brouwpunt 5L (90min) (rev 4)

Batch Size : 5.6 L
 Boil Size : 8.66 L
 Post-Boil Vol : 5.96 L

Mash Water : 2.86 L
 Sparge Water : 6.83 L
 Boil Time : 90 min
 Total Water : 9.69 L



30 EBC

Brewhouse Efficiency: 71.8%

Mash Efficiency: 73.3%

Mash Profile

3 Step Robobrew Mash and Sparge Med Body
 59.7 °C - Strike Temp
 55 °C - 15 min - Mash In
 65 °C - 40 min - Maltose Rest
 75 °C - 10 min - Ramp up for mash out

Fermentation Profile

Imported
 19.4 °C - 4 days - Primary
 19.4 °C - 10 days - Secondary
 18.3 °C - 30 days - Conditioning

Water Profile

NL Hoofddorp Rein Tap Water (2020-Q3 WQR) (St...
 Ca 74 Mg 15 Na 68 Cl 92 SO 150

SO/Cl ratio: 1.6

Mash pH: 5.4

Sparge pH: 6

Measurements

Mash pH:

Boil Volume:

Pre-Boil Gravity:

Post-Boil Kettle Volume:

Original Gravity:

Fermenter Top-Up:

Fermenter Volume:

Final Gravity:

Bottling Volume:

Recipe Notes

Target: ABV = 3.6 %