

Fast Minstrel - Cluster Session Brew - 3.8%

Blonde Ale

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Type: All Grain

IBU : 28 (Tinseth)
 BU/GU : 0.77
 Colour : 9 EBC
 Carbonation : 2.5 CO2-vol

Pre-Boil Gravity : 1.031
 Original Gravity : 1.036
 Final Gravity : 1.007

Fermentables (895 g)

835 g - BEST Pale ale 3.2 EBC (93.3%)
 56 g - Flaked Oats 2.7 EBC (6.3%)
 4 g - Black Malt 985 EBC (0.5%)

Hops (18 g)

30 min - 4.7 g - Cluster - 6% (11 IBU)
 12 min - 13.3 g - Minstrel - 5.7% (17 IBU)

Miscellaneous

Mash - 0.25 g - Baking Soda (NaHCO3)
 ^ Lot # 41190621/3
 ^ Brouwstore (NL) 003.106.2
 Mash - 4.533 ml - CRS/AMS (6.3% HCl, 8.6% H2SO4)
 Mash - 0.67 g - Calcium Chloride (CaCl2) 33 %...
 ^ Lot # 115038
 ^ Brouwstore (NL) 055.035.0
 Mash - 1.067 g - Calcium Chloride (dihydrate)
 Mash - 0.67 g - Canning Salt (NaCl)
 ^ Albert Heijn (NL)
 Mash - 1.03 g - Epsom Salt (MgSO4)
 ^ Lot # /2119000091
 ^ Brouwstore (NL) 055.027.7
 Mash - 0.667 g - Gypsum
 Mash - 1.32 g - Gypsum (CaSO4)
 ^ The Malt Miller (UK) CHE-03-004
 Mash - 0.4 ml - Lactic Acid 80% 80%
 ^ Lot # 20200213
 ^ Brouwstore (NL) 003.002.3

Yeast

26.7 ml - Bootleg Biology OSLO OSLO

01 Brouwpunt 5L (30min) (rev 4)

Batch Size : 5.6 L
 Boil Size : 6.86 L
 Post-Boil Vol : 5.96 L

Mash Water : 2.52 L
 Sparge Water : 5.27 L
 Boil Time : 30 min
 Total Water : 7.79 L



9 EBC

Brewhouse Efficiency: 71.8%
 Mash Efficiency: 73.3%

Mash Profile

Mash Steps
 73.3 °C - Strike Temp
 67 °C - 60 min - Strike

Fermentation Profile

01 Ale + DR + Conditioning
 18 °C - 10 days - Primary
 21 °C - 4 days - Diacetyl rest
 18 °C - 14 days - Carbonation
 18 °C - 28 days - Conditioning

Water Profile

02 NL Spa Reine Flat Mineral Water (www.ah.nl...)
 Ca 55 Mg 15 Na 46 Cl 75 SO 150

SO/Cl ratio: 2
 Mash pH: 5.39
 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: