

A Night At The Opera - 4.1%

Classic English-Style Pale Ale

Author: The Thirsty Otter

Type: All Grain

IBU : 21 (Tinseth)
BU/GU : 0.52
Colour : 12 EBC
Carbonation : 2 CO2-vol

Pre-Boil Gravity : 1.029
Original Gravity : 1.038
Total Gravity : 1.040
Final Gravity : 1.009

Fermentables (949 g)

790 g - Mild Ale Malt 7 EBC (83.3%)
^ The Malt Miller (UK) MAL-00-012
85 g - Carapils 4 EBC (9%)
^ The Malt Miller (UK) MAL-01-016
68 g - Pale Crystal Malt 60 EBC (7.2%)
^ The Malt Miller (UK) MAL-01-019
6 g - Pale Chocolate Malt 525 EBC (0.6%)
^ The Malt Miller (UK) MAL-02-011
25 g - Bottling - Sugar, Table (Sucrose) 2 EBC
^ Albert Heijn (NL)

Hops (21 g)

30 min - 7 g - Fuggle (Whole) - 5% (13 IBU)
^ Worcester Hop Shop (UK)
10 min - 7 g - Fuggle (Whole) - 5% (7 IBU)
^ Worcester Hop Shop (UK)

Hop Stand

10 min hopstand @ 75 °C
10 min 75 °C - 7 g - Godiva (Whole) - 7.52% (...)
^ Worcester Hop Shop (UK)

Miscellaneous

Mash - 2.52 l - NL Spa Reine Flat Mineral Water
^ AH (NL)
Mash - 0.22 g - Baking Soda (NaHCO3)
^ Lot # 41190621/3
^ Brouwstore (NL) 003.106.2
Mash - 1.84 g - Calcium Chloride (CaCl2) 33 %...
^ Lot # 115038
^ Brouwstore (NL) 055.035.0
Mash - 0.22 g - Canning Salt (NaCl)
^ Albert Heijn (NL)
Mash - 0.56 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 - 6.17 l - NL Spa Reine Flat Mineral W...
^ AH (NL)

Yeast

0.5 pkg - Lallemend (LalBrew) Nottingham Yeast
^ Lot # 10812600807711V
^ The Malt Miller (UK) YEA-02-023

01 Brouwpunt 5L (60min) (rev 4)

Batch Size : 5.6 L
Boil Size : 7.76 L
Post-Boil Vol : 5.96 L

Mash Water : 2.85 L
Sparge Water : 5.94 L
Boil Time : 60 min
Total Water : 8.79 L



12 EBC

Brewhouse Efficiency: 71.8%
Mash Efficiency: 73.3%

Mash Profile

01 One Step Mash (60 min)
71 °C - Strike Temp
65 °C - 60 min - Temperature

Fermentation Profile

01 Ale + DR + Conditioning
18 °C - 10 days - Primary
21 °C - 4 days - Diacetyl rest
18 °C - 45 days - Conditioning

Water Profile

NL Spa Reine Flat Mineral Water (www.ah.nl) (...)
Ca 45 Mg 2 Na 20 Cl 64 SO 40 HCO 35

SO/Cl ratio: 0.6

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: