

ESB Bullion - 5%

Strong Bitter

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Type: All Grain

IBU : 42 (Tinseth)
 BU/GU : 0.73
 Colour : 14 EBC
 Carbonation : 1.9 CO2-vol

Pre-Boil Gravity : 1.039
 Original Gravity : 1.057
 Final Gravity : 1.019

Fermentables (1.47 kg)

1.16 kg - Pale Ale Finest Maris Otter 5 EBC (...
 156 g - Imperial Malt 45 EBC (10.6%)
 156 g - Wheat Malt 4 EBC (10.6%)

Hops (17.9 g)

First Wort - 1.1 g - Bullion - 7.5% (5 IBU)
 90 min - 3.3 g - Bullion - 7.5% (13 IBU)
 45 min - 4.5 g - Bullion - 7.5% (16 IBU)
 10 min - 3.4 g - Bullion - 7.5% (6 IBU)

Hop Stand

20 min hopstand @ 80 °C
 20 min - 5.6 g - Bullion - 7.5% (3 IBU)

Miscellaneous

Mash - 0.52 g - Epsom Salt (MgSO4)
 ^ Lot # /2119000091
 ^ Brouwstore (NL) 055.027.7
 Mash - 2.4 g - Gypsum (CaSO4)
 ^ The Malt Miller (UK) CHE-03-004
 Mash - 1 ml - Lactic Acid 80% 80%
 ^ Lot # 20200213
 ^ Brouwstore (NL) 003.002.3
 Sparge - 1.04 ml - Lactic Acid 80% 80%
 ^ Lot # 20200213
 ^ Brouwstore (NL) 003.002.3

Yeast

0.6 pkg - 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 : 4.42 L
 Sparge Water : 5.77 L
 Boil Time : 90 min
 Total Water : 10.19 L



14 EBC

Brewhouse Efficiency: 71.8%
 Mash Efficiency: 73.3%

Mash Profile

High fermentability
 74.4 °C - Strike Temp
 68 °C - 60 min - Temperature
 72 °C - 20 min - Temperature
 78 °C - 5 min - Temperature

Fermentation Profile

Ale
 18 °C - 0.5 days - Primary
 22 °C - 4 days - Primary

Water Profile

NL Hoofddorp Rein Tap Water (2020-Q3 WQR) (St...
 Ca 95 Mg 15 Na 68 Cl 92 SO 200

SO/Cl ratio: 2.2
 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: