

xBmt-20191202 Impact Of Adding Zinc At Yeast Pitch - 7.1%

Helles Bock

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Type: All Grain

IBU : 22 (Tinseth)
 BU/GU : 0.3
 Colour : 14 EBC
 Carbonation : 2.3 CO2-vol

Pre-Boil Gravity : 1.054
 Original Gravity : 1.070
 Total Gravity : 1.073
 Final Gravity : 1.019

Fermentables (1.75 kg)

1.612 kg - Pilsner (2 Row) Ger 3.9 EBC (91.9%)
 142 g - Honey Malt 49.5 EBC (8.1%)
 32 g - Bottling - Sugar, Table (Sucrose) 2 EBC
 ^ Albert Heijn (NL)

Hops (7.3 g)

60 min - 3.4 g - Hallertau Magnum - 14% (20 IBU)
 5 min - 3.9 g - Tettnang - 4.5% (2 IBU)

Miscellaneous

Mash - 0.58 g - Baking Soda (NaHCO3)
 ^ Lot # 41190621/3
 ^ Brouwstore (NL) 003.106.2
 Mash - 2.18 g - Calcium Chloride (CaCl2) 33 %...
 ^ Lot # 115038
 ^ Brouwstore (NL) 055.035.0
 Mash - 0.74 g - Canning Salt (NaCl)
 ^ Albert Heijn (NL)
 Mash - 0.46 g - Epsom Salt (MgSO4)
 ^ Lot # /2119000091
 ^ Brouwstore (NL) 055.027.7
 Mash - 0.47 g - Gypsum (CaSO4)
 ^ The Malt Miller (UK) CHE-03-004
 Mash - 1.4 ml - Lactic Acid 80% 80%
 ^ Lot # 20200213
 ^ Brouwstore (NL) 003.002.3

Yeast

0 ml - Imperial Yeast Harvest L17

01 Brouwpunt 5L (60min) (rev 3)

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

Mash Water : 5.26 L
 Sparge Water : 4 L
 Boil Time : 60 min
 Top-Up Water : 0.3 L
 Total Water : 9.56 L



14 EBC

Brewhouse Efficiency: 71.8%
 Mash Efficiency: 73.3%

Mash Profile

01 Light Body Profile (148F)
 67.9 °C - Strike Temp
 62.2 °C - 75 min - Mash In

Fermentation Profile

Imported
 12.2 °C - 7 days - Primary
 18.9 °C - 10 days - Secondary
 3.3 °C - 30 days - Conditioning

Water Profile

02 NL Spa Reine Flat Mineral Water (www.ah.nl...)
 Ca 44 Mg 7 Na 50 Cl 100 SO 50

SO/Cl ratio: 0.5
 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:

Recipe Notes

Water Profile: Ca 56 | Mg 19 | Na 38 | SO4 47 | Cl 64

<http://brulosophy.com/2019/12/02/the-impact-of-adding-zinc-at-yeast-pitch-exbeeriment-results/>