

7 EBC

## xBmt-20230724 Hop Comparison: Tettnanger vs. Spalter Select - 59

International Pale Lager 01 B

Author: Will Lovell

Type: All Grain

IBU : 24 (Tinseth)

BU/GU : 0.47 Colour : 7 EBC

Carbonation : 2.5 CO2-vol

Pre-Boil Gravity : 1.038
Original Gravity : 1.050
Final Gravity : 1.012

Fermentables (1.35 kg)

1.346 kg - Pilsen MD 3.2 EBC (100%)

Hops (21.3 g)

60 min - 15.9 g - Tettnanger OR Spalt Select... 30 min - 2.7 g - Tettnanger OR Spalt Select -...

5 min - 2.7 g - Tettnanger OR Spalt Select -...

Miscellaneous

Mash - 1.89 g - Calcium Chloride (CaCl2) 33 %...

^ Lot # 115038

^ Brouwstore (NL) 055.035.0

Mash - 1.2 g - Gypsum (CaSO4) ^ The Malt Miller (UK) CHE-03-004

Mash - 0.7 ml - Lactic Acid 80% 80%

^ Lot # 20200213

^ Brouwstore (NL) 003.002.3

Yeast

0.3 pkg - Imperial Yeast Global L13

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

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

Mash Water : 4.04 L Sparge Water : 5.13 L Boil Time : 60 min

Total Water : 9.17 L

Brewhouse Efficiency: 71.8% Mash Efficiency: 73.3%

Mash Profile

03 - High/Moderate Fermentability

72.9 °C - Strike Temp

 $66.7~^{\circ}\text{C}$  - 60~min - Temperature

Fermentation Profile

Ale

17.8 °C - 14 days - Primary

Water Profile

02 NL Spa Reine Flat Mineral Water (www.ah.nl...

Ca 60 Mg 2 Na 3 Cl 48 SO 77 HCO 17

SO/Cl ratio: 1.6 Mash pH: 5.38 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 60 | Mg 0| Na 0 | SO4 77 | Cl 50 https://brulosophy.com/2023/07/24/exbeeriment-hop-comparison-tettnanger-vs-spalter-select-in-a-pale-lager/