

xBmt-20200427 Calcium Chloride At Packaging xBmt - 5.3%

German Pils

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Type: All Grain

IBU : 49 (Tinseth)  
BU/GU : 0.93  
Colour : 10 EBC  
Carbonation : 2.5 CO2-vol

Pre-Boil Gravity : 1.041  
Original Gravity : 1.053  
Final Gravity : 1.013

Fermentables (1.43 kg)

1.387 kg - Odyssey Pilsner (Root Shoot Maltin...  
43 g - Melanoidin (Weyermann) 59 EBC (3%)

Hops (28.8 g)

60 min - 4.8 g - Tettnang - 4.5% (10 IBU)  
60 min - 1.7 g - Hallertau Magnum - 14% (11 IBU)  
30 min - 13.4 g - Tettnang - 4.5% (21 IBU)  
10 min - 8.9 g - Tettnang - 4.5% (6 IBU)

Miscellaneous

Mash - 1.85 g - Calcium Chloride (CaCl2) 33 %...  
^ Lot # 115038  
^ Brouwstore (NL) 055.035.0  
Mash - 0.12 g - Canning Salt (NaCl)  
^ Albert Heijn (NL)  
Mash - 1.18 g - Gypsum (CaSO4)  
^ The Malt Miller (UK) CHE-03-004  
Mash - 0.6 ml - Lactic Acid 80% 80%  
^ Lot # 20200213  
^ Brouwstore (NL) 003.002.3

Yeast

0.5 pkg - Imperial Yeast Que Bueno L09

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

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

Mash Water : 4.29 L  
Sparge Water : 4.96 L  
Boil Time : 60 min  
Total Water : 9.25 L



10 EBC

Brewhouse Efficiency: 71.8%  
Mash Efficiency: 73.3%

Mash Profile

02 Light/Medium Body Profile (150F)  
72.3 °C - Strike Temp  
66.1 °C - 60 min - Mash In

Fermentation Profile

Imported  
12.2 °C - 14 days - Primary  
18.3 °C - 10 days - Secondary  
15.6 °C - 30 days - Conditioning

Water Profile

02 NL Spa Reine Flat Mineral Water (www.ah.nl...  
Ca 59 Mg 2 Na 8 Cl 55 SO 75 HCO 17

SO/Cl ratio: 1.4  
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:

Recipe Notes

Starting Water Profile: Ca 61 | Mg 0 | Na 8 | SO4 75 | Cl 55  
Profile Following Post-Fermentation CaCl Addition: Ca 89 | Mg 0 | Na 0 | SO4 75 | Cl 106  
<https://brulosophy.com/2020/04/27/water-chemistry-adjusting-beer-with-calcium-chloride-at-packaging-ex-beeriment-results/>