

9 EBC

xBmt-20200406 SMB Amount - 4.2%

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

Author: Jake Huolihan Boil Size

Type: All Grain

IBU : 52 (Tinseth) BU/GU : 1.15 Colour : 9 EBC

Carbonation : 2.5 CO2-vol

Pre-Boil Gravity : 1.035 : 1.045 Original Gravity : 1.013 Final Gravity

Fermentables (1.22 kg)

1.19 kg - Odyssey Pilsner 3.9 EBC (97.5%) 30 g - Melanoidin (Weyermann) 59 EBC (2.5%)

Hops (25.3 g)

60 min - 4.7 g - Magnum - 12.2% (29 IBU) 10 min - 6.7 g - Sabro - 14% (16 IBU) 10 min - 3.2 g - Bru-1 - 13% (7 IBU) 0 min - 2.7 g - Eukanot - 14%

Dry Hops

3 days - 4 g - Bru-1 - 13% 3 days - 4 g - Sabro - 14%

Miscellaneous

Mash - 0.99 g - Baking Soda (NaHCO3)

^ Lot # 41190621/3

^ Brouwstore (NL) 003.106.2

Mash - 2.62 g - Calcium Chloride (CaCl2) 33 %...

^ Lot # 115038

^ Brouwstore (NL) 055.035.0

Mash - 0.97 g - Canning Salt (NaCl)

^ Albert Heijn (NL)

Mash - 1.19 g - Epsom Salt (MgSO4)

^ Lot # /2119000091

^ Brouwstore (NL) 055.027.7 Mash - 2.35 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

0.5 pkg - Imperial Yeast Cablecar L05

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

Mash Water : 3.66 L Sparge Water : 5.39 L Boil Time : 60 min Total Water : 9.05 L

Brewhouse Efficiency: 71.8% Mash Efficiency: 73.3%

Mash Profile 152 No Sparge

72.9 °C - Strike Temp

66.7 °C - 60 min - Mash Step

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 100 Mg 15 Na 75 Cl 131 SO 200 HCO 95

SO/Cl ratio: 1.5 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 49 | Mg 0 | Na 8 | SO4 38 | Cl 61 http://brulosophy.com/2020/04/06/impact-higher-dosage-rates-of-sodium-metabisulfite-smb-have-on-beer-c haracter-exbeeriment-results/