

51 EBC

## Lager Angst - 5.1%

Czech Dark Lager 01 Brouwpunt 5L (60min) (rev 4) Author: BigMack@homebrewinguk.com Batch Size : 5.6 L Boil Size : 7.76 L

Type: All Grain

IBU : 28 (Tinseth) BU/GU : 0.56 Colour : 51 EBC : 2.4 CO2-vol Carbonation

Pre-Boil Gravity : 1.036 : 1.047 Original Gravity Total Gravity : 1.049 Final Gravity : 1.010

Fermentables (1.27 kg)

872 g - Bohemian Pilsner Malt 3.5 EBC (68.5%)

^ The Malt Miller (UK) MAL-00-031

146 g - CaraMunich Type 2 120 EBC (11.5%)

^ The Malt Miller (UK) MAL-01-006 146 g - Victory Malt 49.5 EBC (11.5%) 109 g - Pale Chocolate Malt 525 EBC (8.6%)

^ The Malt Miller (UK) MAL-02-011

30 g - Bottling - Sugar, Table (Sucrose) 2 EBC

^ Albert Heijn (NL)

Hops (18 g)

60 min - 11 g - Saaz - 3.6% (20 IBU)

^ Lot # T9020044SAA

^ Brouwmaatje (NL) BM-HUM.420000 Humlegarden...

20 min - 7 g - Saaz - 3.6% (8 IBU)

^ Lot # T9020044SAA

^ Brouwmaatje (NL) BM-HUM.420000 Humlegarden...

Miscellaneous

Mash - 0.04 g - Baking Soda (NaHCO3)

^ Lot # 41190621/3

^ Brouwstore (NL) 003.106.2

Mash - 0.78 g - Calcium Chloride (CaCl2) 33 %... Mash pH:

^ Lot # 115038

^ Brouwstore (NL) 055.035.0

Mash - 0.78 g - Canning Salt (NaCl)

^ Albert Heijn (NL)

Mash - 0.2 g - Epsom Salt (MgSO4)

^ Lot # /2119000091

^ Brouwstore (NL) 055.027.7 Mash - 0.2 g - Gypsum (CaSO4)

^ The Malt Miller (UK) CHE-03-004

1 pkg - Wyeast Labs Bohemian Lager 2124

Post-Boil Vol : 5.96 L

Mash Water : 3.82 L Sparge Water : 5.28 L Boil Time : 60 min Total Water : 9.1 L

Brewhouse Efficiency: 71.8% Mash Efficiency: 73.3%

Mash Profile

01 Four Step Mash (90 min)

59.7 °C - Strike Temp

55 °C - 15 min - Temperature 64 °C - 30 min - Temperature 70 °C - 30 min - Temperature 77 °C - 15 min - Temperature

Fermentation Profile

01 Ale + DR + Conditioning 18 °C - 10 days - Primary

21 °C - 4 days - Diacetyl rest

18 °C - 14 days - Carbonation

18 °C - 28 days - Conditioning

Water Profile

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

Ca 20 Mg 4 Na 38 Cl 75 SO 25

SO/Cl ratio: 0.3 Mash pH: 5.38 Sparge pH: 6

Measurements

Boil Volume:

Pre-Boil Gravity:

Post-Boil Kettle Volume:

Original Gravity:

Fermenter Top-Up:

Fermenter Volume:

Final Gravity:

Bottling Volume:

## Recipe Notes

Target: ABV = 4.8 %, IBU = 28, OG = 1.048, FG = 1.012.

## Lager Angst



Mash technique: BIAB Step mash, mashout, dark grains added at vorlauf.

Mash rests: 131°F (55°C) 15 minutes, 147°F (64°C) 30 minutes, 158°F (70°C) 30 minutes, 170°F (77°C) 15

Boil length: 60 minutes + 15 mins kettle hop steeping. Into sealed bucket at 80°C for no-chill cooling with no hops.