

32 EBC

Christmas Tree Bitter - 3.8%

Best Bitter

Author: GHW@homebrewinguk.com

Type: All Grain

IBU : 31 (Tinseth) BU/GU : 0.74 Colour : 32 EBC Carbonation : 1.6 CO2-vol

Pre-Boil Gravity : 1.032 : 1.041 Original Gravity Final Gravity : 1.012

Fermentables (1.1 kg)

963 g - Pale Malt 2-Row 5.9 EBC (87.6%) 53 g - Chateau Biscuit 45 EBC (4.8%) ^ Lot # 5425000394839 (24.11.2022) ^ Brouwmaatje (NL) BM-BL.051.098.2/1 40 g - Red Crystal Malt 400 EBC (3.6%)

27 g - 30 min - Steep - Chocolate Malt 950 EB...

^ The Malt Miller (UK) MAL-02-004

16 g - Extra Light Crystal Malt 100 EBC (1.5%)

^ The Malt Miller (UK) MAL-01-031

Hops (26 g)

60 min - 4.7 g - East Kent Goldings - 5.4% (1... ^ Hopeye (GB) HE-50G-HOPS-EASTKENTGOLDINGS (5... 30 min - 4 g - East Kent Goldings - 5.4% (9 IBU) ^ Hopeye (GB) HE-50G-HOPS-EASTKENTGOLDINGS (5... 10 min - 4 g - East Kent Goldings - 5.4% (5 IBU) ^ Hopeye (GB) HE-50G-HOPS-EASTKENTGOLDINGS (5...

Hop Stand

30 min hopstand @ 75 °C

30 min 75 °C - 13.3 g - East Kent Goldings -...

^ Hopeye (GB) HE-50G-HOPS-EASTKENTGOLDINGS (5...

Miscellaneous

Mash - 0.63 g - Baking Soda (NaHCO3)

^ Lot # 41190621/3

^ Brouwstore (NL) 003.106.2

Mash - 1.15 g - Calcium Chloride (CaCl2) 33 %...

^ Lot # 115038

^ Brouwstore (NL) 055.035.0

Mash - 0.63 g - Canning Salt (NaCl)

^ Albert Heijn (NL)

Mash - 1.17 g - Epsom Salt (MgSO4)

^ Lot # /2119000091

^ Brouwstore (NL) 055.027.7 Mash - 1.52 g - Gypsum (CaSO4) ^ The Malt Miller (UK) CHE-03-004 Mash - 0.2 ml - Lactic Acid 80% 80%

^ Lot # 20200213

^ Brouwstore (NL) 003.002.3

Yeast

0.3 pkg - CrossMyLoof Four

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

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

Mash Water : 3.22 L Sparge Water : 5.69 L Boil Time : 60 min Total Water : 8.91 L

Brewhouse Efficiency: 71.8% Mash Efficiency: 73.3%

Mash Profile

01 One Step Mash (60 min) 73.3 °C - Strike Temp 67 °C - 60 min - Temperature

76 °C - 15 min - Sparge

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 60 Mg 15 Na 50 Cl 75 SO 150 HCO 67

SO/Cl ratio: 2 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:

Christmas Tree Bitter



Recipe Notes

Target: ABV = 4.52 %, IBU = 29.48, EBC = 27.74, OG = 1.046, FG = 1.012, Mash pH = 5.26