

Chris Colby - Munich Dunkel - 6.2%

Munich Dunkel

Author: Chris Colby

Type: All Grain

IBU : 15 (Tinseth)
 BU/GU : 0.28
 Colour : 33 EBC
 Carbonation : 2.5 CO2-vol

Pre-Boil Gravity : 1.041
 Original Gravity : 1.053
 Total Gravity : 1.055
 Final Gravity : 1.008

Fermentables (1.34 kg)

1.066 kg - Munich Malt 15 EBC (79.8%)
 ^ Brouwmaatje (NL) 051.043.8/1
 117 g - Swaen Pilsner 3.7 EBC (8.8%)
 ^ Brouwmaatje (NL) BM-SWAENØPILSNER1
 88 g - Melanoidin Malt 70 EBC (6.6%)
 ^ The Malt Miller (UK) MAL-00-025
 36 g - CaraMunich Type 1 101 EBC (2.7%)
 ^ Brouwmaatje (NL) BM-BL.051.311.9/1
 29 g - Carafa I 630 EBC (2.2%)
 ^ Brouwmaatje (NL) 051.318.4/250
 29 g - Bottling - Sugar, Table (Sucrose) 2 EBC
 ^ Albert Heijn (NL)

Hops (11.6 g)

60 min - 11.6 g - Hersbrucker - 2.75% (15 IBU)

Miscellaneous

Mash - 0.65 g - Baking Soda (NaHCO3)
 ^ Lot # 41190621/3
 ^ Brouwstore (NL) 003.106.2
 Mash - 2.29 g - Calcium Chloride (CaCl2) 33 %...
 ^ Lot # 115038
 ^ Brouwstore (NL) 055.035.0
 Mash - 0.64 g - Canning Salt (NaCl)
 ^ Albert Heijn (NL)
 Mash - 0.2 g - Epsom Salt (MgSO4)
 ^ Lot # /2119000091
 ^ Brouwstore (NL) 055.027.7
 Mash - 0.21 g - Gypsum (CaSO4)
 ^ The Malt Miller (UK) CHE-03-004
 Mash - 0.4 ml - Lactic Acid 80% 80%
 ^ Lot # 20200213
 ^ Brouwstore (NL) 003.002.3

Yeast

0.3 pkg - Fermentis Saflager Lager W-34/70
 ^ The Malt Miller (UK) YEA-02-032

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

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

Mash Water : 4.01 L
 Sparge Water : 5.15 L
 Boil Time : 60 min
 Total Water : 9.16 L



33 EBC

Brewhouse Efficiency: 71.8%
 Mash Efficiency: 73.3%

Mash Profile

01 One Step Mash (60 min)
 71 °C - Strike Temp
 65 °C - 60 min - Temperature

Fermentation Profile

01 Ale + DR + Conditioning
 12 °C - 10 days - Primary
 15 °C - 4 days - Diacetyl rest
 12 °C - 14 days - Carbonation
 12 °C - 28 days - Conditioning

Water Profile

02 NL Spa Reine Flat Mineral Water (www.ah.nl...)
 Ca 40 Mg 4 Na 50 Cl 100 SO 25

SO/Cl ratio: 0.3

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

Target: ABV = 5.4 %, IBU = 25, OG = 1.055.