

Munich Dunkel

Munich Dunkel (4 B)

Type: All Grain
Batch Size: 27.00 l
Boil Size: 36.16 l
Boil Time: 60 min
End of Boil Vol: 30.16 l
Final Bottling Vol: 25.00 l
Fermentation: Ale, Two Stage

Date: 01 Aug 2014
Brewer: Graeme Smith
Asst Brewer:
Equipment: Pot and Big Cooler (10 Gal/37.8 L)
- All Grain
Efficiency: 65.00 %
Est Mash Efficiency: 69.8 %
Taste Rating: 30.0



Taste Notes:

Ingredients

Amt	Name	Type	#	%/IBU
6.50 kg	Munich Malt (25.0 EBC)	Grain	1	97.0 %
0.20 kg	Carafa II (1000.0 EBC)	Grain	2	3.0 %
40.00 g	Hallertau [4.80 %] - Boil 60.0 min	Hop	3	18.4 IBUs
20.00 g	Hallertau [4.80 %] - Boil 20.0 min	Hop	4	5.6 IBUs
2.0 pkg	SafLager West European Lager (DCL/Fermentis #S-23) [23.66 ml]	Yeast	5	-

Gravity, Alcohol Content and Color

Est Original Gravity: 1.049 SG
Est Final Gravity: 1.014 SG
Estimated Alcohol by Vol: 4.7 %
Bitterness: 23.9 IBUs
Est Color: 44.7 EBC

Measured Original Gravity: 1.049 SG
Measured Final Gravity: 1.014 SG
Actual Alcohol by Vol: 4.6 %
Calories: 461.3 kcal/l

Mash Profile

Mash Name: Single Infusion, Medium Body,
Batch Sparge
Sparge Water: 18.12 l
Sparge Temperature: 75.6 C
Adjust Temp for Equipment: FALSE

Total Grain Weight: 6.70 kg
Grain Temperature: 22.2 C
Tun Temperature: 22.2 C
Mash PH: 5.20

Mash Steps

Name	Description	Step Temperature	Step Time
Mash In	Add 25.00 l of water at 72.7 C	68.0 C	60 min

Sparge: Batch sparge with 2 steps (Drain mash tun , 18.12l) of 75.6 C water

Mash Notes: Simple single infusion mash for use with most modern well modified grains (about 95% of the time).

Carbonation and Storage

Carbonation Type: Bottle
Pressure/Weight: 147.05 g
Keg/Bottling Temperature: 21.1 C
Fermentation: Ale, Two Stage

Volumes of CO2: 2.3
Carbonation Used: Bottle with 147.05 g Corn
Sugar
Age for: 30.00 days
Storage Temperature: 18.3 C

Notes

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