

#160 Dunkel Kölsch

Munich Dunkel (4 B)

Type: All Grain
Batch Size: 20,00 L
Boil Size: 22,83 L
Boil Time: 60 min
End of Boil Vol: 20,83 L
Final Bottling Vol: 18,80 L
Fermentation: Ale, Single Stage

Date: 12 Jun 2022
Brewer: Thomas Nylander Nørgaard
Asst Brewer:
Equipment: Brewster Beacon 30
Efficiency: 80,00 %
Est Mash Efficiency: 80,0 %
Taste Rating: 30,0



Taste Notes:

Ingredients

| Amt | Name | Type | # | %/IBU | Volume |
|---------|--|-------|---|-----------|--------|
| 3,00 kg | Munich II (Weyermann) (16,7 EBC) | Grain | 1 | 78,9 % | 1,96 L |
| 0,30 kg | Special Roast (98,5 EBC) | Grain | 2 | 7,9 % | 0,20 L |
| 0,24 kg | Caramunich Malt (110,3 EBC) | Grain | 3 | 6,3 % | 0,16 L |
| 0,20 kg | Caramel Rye (Weyermann) (69,0 EBC) | Grain | 4 | 5,3 % | 0,13 L |
| 0,04 kg | Black (Patent) Malt (985,0 EBC) | Grain | 5 | 1,1 % | 0,03 L |
| 0,02 kg | CHÂTEAU CHOCOLAT (900,7 EBC) | Grain | 6 | 0,6 % | 0,01 L |
| 8,90 g | Topaz [15,90 %] - Boil 60,0 min | Hop | 7 | 17,7 IBUs | - |
| 52,70 g | East Kent Goldings (EKG) [4,90 %] - Boil 7,0 min | Hop | 8 | 9,5 IBUs | - |
| 1,0 pkg | Kölsch (Cross My Loof #) | Yeast | 9 | - | - |

Gravity, Alcohol Content and Color

Est Original Gravity: 1,047 SG
Est Final Gravity: 1,007 SG
Estimated Alcohol by Vol: 5,2 %
Bitterness: 27,2 IBUs
Est Color: 35,7 EBC

Measured Original Gravity: 1,047 SG
Measured Final Gravity: 1,010 SG
Actual Alcohol by Vol: 4,9 %
Calories: 436,7 kcal/l

Mash Profile

Mash Name: Single Infusion, Light Body,
No Mash Out
Sparge Water: 16,72 L
Sparge Temperature: 75,6 C
Adjust Temp for Equipment: FALSE
Est Mash PH: 5,35
Measured Mash PH: 5,20

Total Grain Weight: 3,80 kg
Grain Temperature: 22,2 C
Tun Temperature: 22,2 C
Target Mash PH: 5,20
Mash Acid Addition: None
Sparge Acid Addition: None

Mash Steps

| Name | Description | Step Temperature | Step Time |
|---------|--------------------------------|------------------|-----------|
| Mash In | Add 11,12 L of water at 69,9 C | 64,4 C | 60 min |

Sparge: Fly sparge with 16,72 L water at 75,6 C

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

Carbonation and Storage

Carbonation Type: Keg
Pressure/Weight: 12,54 PSI
Keg/Bottling Temperature: 7,2 C
Fermentation: Ale, Single Stage
Fermenter:

Volumes of CO₂: 2,3
Carbonation Est: Keg with 12,54 PSI
Carbonation (from Meas Vol): Keg with 12,54 PSI
Age for: 30,00 days
Storage Temperature: 18,3 C

Notes

Created with BeerSmith