

Bryg Nr. 122 Doppelbock

Doppelbock (5 C)

Type: All Grain

Batch Size: 200,00 L

Boil Size: 241,96 L

Boil Time: 90 min

End of Boil Vol: 223,96 L

Final Bottling Vol: 190,00 L

Fermentation: Lager, Single Stage

Date: 26 Feb 2022

Brewer: ØL bryghus

Asst Brewer:

Equipment: 200 L Polsinelli 66%

Efficiency: 72,00 %

Est Mash Efficiency: 77,4 %

Taste Rating: 35,0



Taste Notes:

Prepare for Brewing

- Create a yeast starter with 30,00 L of wort (3994,21 g dry malt extract)
- Clean and Prepare Brewing Equipment
- Total Water Needed: 337,78 L
- Mash Water Acid: None

Water Prep

Amt	Name	Type	#	%/IBU	Volume
335,00 L	Øster Løgum Vand	Water	1	-	-
70,00 ml	Lactic Acid (Mash)	Water Agent	2	-	-
15,00 g	Epsom Salt (MgSO4) (Mash)	Water Agent	3	-	-
10,00 g	Salt (Mash)	Water Agent	4	-	-

Mash or Steep Grains

Mash Ingredients

Amt	Name	Type	#	%/IBU	Volume
30,00 kg	CHÂTEAU MUNICH (25,0 EBC)	Grain	5	34,9 %	19,56 L
30,00 kg	CHÂTEAU PILSEN 2RS (3,0 EBC)	Grain	6	34,9 %	19,56 L
10,00 kg	CHÂTEAU CHIT BARLEY MALT FLAKES (4,9 EBC)	Grain	7	11,6 %	6,52 L
8,20 kg	CHÂTEAU CARA RUBY® (50,0 EBC)	Grain	8	9,6 %	5,35 L
5,00 kg	BEST Caramel Munich II (BESTMALZ) (120,0 EBC)	Grain	9	5,8 %	3,26 L
2,50 kg	CHÂTEAU SPECIAL B® (300,2 EBC)	Grain	10	2,9 %	1,63 L
110,00 g	Amylase Enzyme (Mash 90,0 mins)	Other	11	-	-

Mash Steps

Name	Description	Step Temperature	Step Time
Protein Rest	Add 232,82 L of water at 54,4 C	50,0 C	35 min
Saccharification	Decoct 103,34 L of mash and boil it	67,8 C	45 min
Mash Out	Add 0,13 L of water and heat to 75,6 C over 10 min	75,6 C	10 min

- Sparge Water Acid: 29,1 ml (2,0 tbsp) Lactic Acid (88%)
- Fly sparge with 104,83 L water at 77,0 C
- Add water to achieve boil volume of 241,96 L
- Estimated pre-boil gravity is 1,080 SG

Boil Ingredients

Amt	Name	Type	#	%/IBU	Volume
329,32 g	Saaz [3,75 %] - Boil 60,0 min	Hop	12	9,6 IBUs	-
436,35 g	Hallertauer Hersbrucker [4,00 %] - Boil 30,0 min	Hop	13	11,4 IBUs	-
22,00 g	EuroGel 10 g / 250 liter (Boil 15,0 mins)	Fining	14	-	-
33,00 g	Yeast Nutrient (Boil 15,0 mins)	Other	15	-	-

- Estimated Post Boil Vol: 223,96 L and Est Post Boil Gravity: 1,091 SG

Cool and Transfer Wort

- Cool wort to fermentation temperature
- Transfer wort to fermenter
- Add water if needed to achieve final volume of 200,00 L

Pitch Yeast and Measure Gravity and Volume

Fermentation Ingredients

Amt	Name	Type	#	%/IBU	Volume
15,0 pkg	Bavarian Lager (Wyeast Labs #2206) [125,00 ml]	Yeast	16	-	-

- Measure Actual Original Gravity _____ (Target: 1,091 SG)
 Measure Actual Batch Volume _____ (Target: 200,00 L)

Fermentation

- 26 Feb 2022 - Primary Fermentation (14,00 days at 12,2 C ending at 12,2 C)

Dry Hop and Bottle/Keg

Dry Hop/Bottling Ingredients

Amt	Name	Type	#	%/IBU	Volume
0,15 kg	Maltodextrin [Bottling] (5,9 EBC)	Sugar	17	0,2 %	0,11 L

- Measure Final Gravity: _____ (Estimate: 1,023 SG)
 Date Bottled/Kegged: 12 Mar 2022 - Carbonation: Bottle with 1016,91 g Table Sugar
 Age beer for 30,00 days at 15,6 C
 11 Apr 2022 - Drink and enjoy!

Notes