Märzen - Wedding

Märzen (6 A)

Type: All Grain
Batch Size: 13.50 gal
Boil Size: 16.52 gal
Boil Time: 75 min
End of Boil Vol: 15.10 gal
Final Bottling Vol: 12.75 gal

Final Bottling Vol: 12.75 gal Fermentation: Lager, Two Stage

Taste Notes:

Date: 07/23/18 Brewer: Asst Brewer:

Equipment: Pot and Cooler (10 Gal/37.8 L) - All Grain

Efficiency: 80.00 % Est Mash Efficiency: 85.9 % Taste Rating: 30.0



Ingredients							
Amt	Name		#	%/IBU	Volume		
23.50 gal	Reverse Osmosis	Water	1	-	-		
5.00 g	Calcium Chloride (Mash)	Water Agent	2	-	-		
3.00 g	Gypsum (Calcium Sulfate) (Mash)	Water Agent	3	-	-		
2.00 g	Epsom Salt (MgSO4) (Mash)	Water Agent	4	-	-		
7 lbs	Munich I (Weyermann) (7.1 SRM)	Grain	5	28.0 %	0.55 gal		
7 lbs	Vienna Malt (Weyermann) (3.0 SRM)	Grain	6	28.0 %	0.55 gal		
5 lbs	Munich II (Weyermann) (8.5 SRM)	Grain	7	20.0 %	0.39 gal		
5 lbs	Pilsner (Weyermann) (1.7 SRM)	Grain	8	20.0 %	0.39 gal		
1 lbs	Caramunich I (Weyermann) (51.0 SRM)	Grain	9	4.0 %	0.08 gal		
7.00 g	Calcium Chloride (Sparge)	Water Agent	10	-	-		
2.00 g	Epsom Salt (MgSO4) (Sparge)	Water Agent	11	-	-		
2.00 g	Gypsum (Calcium Sulfate) (Sparge)	Water Agent	12	-	-		
1.25 oz	Nugget [10.00 %] - Boil 60.0 min	Нор	13	16.5 IBUs	-		
4.00 oz	Hersbrucker [1.50 %] - Boil 15.0 min	Нор	14	3.9 IBUs	-		
1.0 pkg	German Bock Lager (White Labs #WLP833) [35.49 ml]	Yeast	15	-	-		

Gravity, Alcohol Content and Color

Est Original Gravity: 1.056 SG Est Final Gravity: 1.013 SG Estimated Alcohol by Vol: 5.7 %

Bitterness: 20.4 IBUs Est Color: 8.2 SRM Measured Original Gravity: 1.055 SG Measured Final Gravity: 1.012 SG Actual Alcohol by Vol: 5.7 % Calories: 183.3 kcal/12oz

Mash Steps						
Name	Description	Step Temperature	Step Time			
Mash In	Add 37.20 qt of water at 162.3 F	150.0 F	60 min			

Sparge: Fly sparge with 11.02 gal water at 168.0 F

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

Date	Tempera	Gravity	
07/23/18 20:12:58	49.0 F	1.055 SG	0.8
07/28/18 08:08:14	49.0 F	1.032 SG	5.3
07/28/18 09:08:39	52.0 F	1.032 SG	5.4
07/30/18 09:00:28	52.0 F	1.030 SG	7.4
07/30/18 09:01:01	53.0 F	1.030 SG	7.4
07/31/18 18:34:32	53.0 F	1.023 SG	8.8
08/01/18 18:30:42	53.0 F	1.021 SG	9.8
08/01/18 20:17:23	55.0 F	1.021 SG	9.8
08/02/18 18:48:55	55.0 F	1.017 SG	10.8
08/02/18 18:49:17	56.0 F	1.017 SG	10.8
08/03/18 18:50:43	56.0 F	1.015 SG	11.8
08/03/18 20:50:57	62.0 F	1.015 SG	11.9
08/04/18 12:11:18	62.0 F	1.013 SG	12.5
08/05/18 12:55:29	62.0 F	1.013 SG	13.5
08/07/18 13:28:08	62.0 F	1.012 SG	15.6

