

45: Black Rock Maibock

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Category: 5 – Bock
Subcategory: A – Maibock/Helles Bock



Kettle Volume: 7.65 gal (S.G.: 1.050)	Efficiency: 67.19%
Boil Duration: 1.75 hr	Attenuation: 80.0%
Evaporation: 1.93 gal	Evap/Hour: 1.1 gal
Water Volume Added: -0.0 gal	
Final Volume: 5.5 gal (S.G.: 1.069)	

Ingredients:

12.0 lb Pilsen Malt
4.0 lb Munich Malt 1
20.0 g Magnum (12.1%) – added during boil, boiled 60 min
20.0 g Hallertau Mittelfruh (3.0%) – added during boil, boiled 15 min
1.0 ea WYeast 2206 Bavarian Lager

Water:

7.5 gal Distilled Water
2.35 gal Lawrence, IN
4.0 g Calcium Chloride (Calcium Chloride (anhydrous))
1.0 g Gypsum (Calcium Sulfate)

Style:

Recipe	Guideline
Original Gravity: 1.069	1.064 – 1.072
Terminal Gravity: 1.014	1.011 – 1.018
Color: 8.97 °SRM	6.0 – 11.0
Alcohol: 7.26%	6.3% – 7.4%
Bitterness: 30.1	23.0 – 35.0



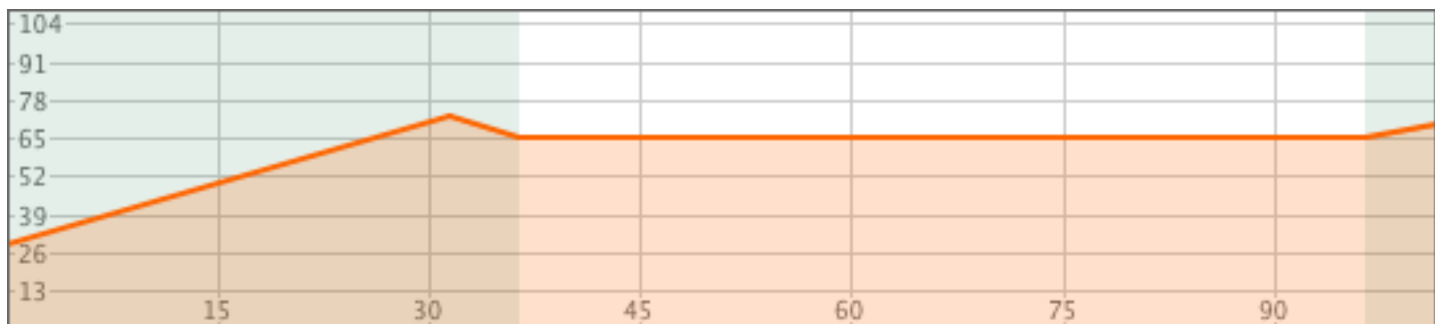
Analysis:

Apparent	Real	Weight	Calories
Original Extract: 16.8 °P	16.8 °P	Alcohol: 28.82 g	198.89 kcal
Attenuation: 80.0%	63.9%	Carbs: 30.24 g	114.92 kcal
Terminal Extract: 3.53 °P	6.07 °P	Protein: 2.12 g	8.47 kcal
% Alcohol: 7.26% ABV	5.69% ABW		Total: 322.28 kcal

Schedule:

Ambient Air: 86 °F
Source Water: 68 °F
Elevation: 240 m

	Elapsed	Thickness	Final Temp	Available
36.5 min Mash In <i>Liquor: 6.25 gal</i> <i>Strike: 73.61 °C</i> <i>Target: 66.0 °C</i>	00:36:27	3.26 L/kg	66.0 °C	4.03 gal
60 min Rest <i>Rest: 60 min</i> <i>Final: 150.2 °F</i>	01:36:27	3.26 L/kg	65.6 °C	4.03 gal
5.0 min Batch Sparge <i>Sparge #1</i> <i>Volume: 3.4 gal</i> <i>Temperature: 85.0 °C</i> <i>Duration: 5.0 min</i> <i>Total Runoff: 7.51 gal</i>	01:41:27	0.0 L/kg	70.9 °C	0.0 gal



Carbonation:

Natural Conditioning
 Beer Temp: 68.0 °F
 Priming Agent Rate: 4.02 g/L
 Priming Agent Mass: 122.3 g
 Volumes CO₂: 2.4

Forced Carbonation
 Beer Temp: 42.0 °F
 Pressure: 12.19 PSI
 Volumes CO₂: 2.4

Volume Adjustments:

-100 mL Kettle
 -.25 gal Fermenter

Notes:

8 mL of slurry propagated in 500 mL, 1 L, 2.5 L of 8°P wort.

Mash pH 5.2. 10 min at 68°C, added cold water, 50 min at 66°C.

Chilled to 67°F with CFC, then moved to chest freezer at 44°F ambient. After 14 hours fermenter was at 50°F. Aerated for 15 minutes, pitched yeast, and raised ambient temperature to 48°F.