

Bockbier Heaven und Hell 5

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **27**
- SRM **21.4**
- Style **Traditional Bock**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.3 liter(s)**
- Total mash volume **28.4 liter(s)**

Steps

- Temp **55 C**, Time **1 min**
- Temp **63 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **21.3 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **1 min** at **55C**
- Keep mash **45 min** at **63C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **12.2 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Münchner Malz Best	3.8 kg (53.5%)	78 %	20
Grain	Wiener Malz Best	0.7 kg (9.9%)	80 %	8
Grain	Pilsner Malz Best	2 kg (28.2%)	81 %	3
Grain	Melanoidin BESTMALZ	0.2 kg (2.8%)	75 %	71
Grain	Caramunich II Best	0.2 kg (2.8%)	73 %	120
Grain	Carafa II Best	0.2 kg (2.8%)	65 %	1100

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Perle	20 g	60 min	9.7 %
Boil	Perle	15 g	15 min	9.7 %
Aroma (end of boil)	Perle	10 g	5 min	9.7 %

Yeasts

Name	Type	Form	Amount	Laboratory
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Wyeast 2206 - Bavarian Lager	Lager	Slant	600 ml	Wyeast Labs
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