

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 |
|---------------------------------|-------|-------|--------|-------------|