

Bock

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **12**
- SRM **18.6**
- Style **Traditional Bock**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **10 %**
- Size with trub loss **11 liter(s)**
- Boil time **70 min**
- Evaporation rate **5 %/h**
- Boil size **13.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **14 liter(s)**

Steps

- Temp **63 C**, Time **50 min**
- Temp **72 C**, Time **10 min**

Mash step by step

- Heat up **10.5 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **50 min** at **63C**
- Keep mash **10 min** at **72C**
- Sparge using **6.2 liter(s)** of **76C** water or to achieve **13.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------------|----------------|-------|-----|
| Grain | Munich Malt | 2 kg (57.1%) | 80 % | 18 |
| Grain | Strzegom Wiedeński | 1 kg (28.6%) | 79 % | 10 |
| Grain | Strzegom Karmel 150 | 0.25 kg (7.1%) | 75 % | 150 |
| Grain | Strzegom Karmel 600 | 0.1 kg (2.9%) | 68 % | 601 |
| Grain | Viking Melanoidynowy | 0.15 kg (4.3%) | 75 % | 60 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------------------|--------|--------|------------|
| Boil | Hallertau Tradition | 10 g | 60 min | 5 % |
| Aroma (end of boil) | Hallertau Tradition | 10 g | 10 min | 5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------|-------|------|--------|------------|
| Saflager W 34/70 | Lager | Dry | 11.5 g | Fermentis |