

## bock

- Gravity **17.3 BLG**
- ABV **7.4 %**
- IBU **26**
- SRM **19.4**
- Style **Traditional Bock**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **4 %**
- Size with trub loss **22.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **25.3 liter(s)**
- Total mash volume **32.5 liter(s)**

### Steps

- Temp **64 C**, Time **60 min**
- Temp **77 C**, Time **5 min**

### Mash step by step

- Heat up **25.3 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **5 min** at **77C**
- Sparge using **8.3 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	słód pilzneński	2 kg (27.7%)	86 %	4
Grain	Strzegom Wiedeński	2 kg (27.7%)	79 %	10
Grain	Strzegom Czekoladowy jasny	0.09 kg (1.2%)	68 %	400
Grain	Special B Malt	0.75 kg (10.4%)	65.2 %	315
Grain	Viking Malt Wędzony Wiśnia	0.39 kg (5.4%)	82 %	10
Grain	Pszeniczny	2 kg (27.7%)	85 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	18 g	60 min	13.5 %
Boil	Sybilla	30 g	10 min	3.5 %
Boil	Sybilla	20 g	5 min	3.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M84 Bohemian Lager	Lager	Slant	200 ml	Mangrove Jack's