

## pils

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **44**
- SRM **3.4**
- Style **Bohemian Pilsener**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **26.9 liter(s)**

### Mash information

- Mash efficiency **96 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **18 liter(s)**

### Steps

- Temp **51 C**, Time **15 min**
- Temp **68 C**, Time **45 min**

### Mash step by step

- Heat up **14 liter(s)** of strike water to **55.4C**
- Add grains
- Keep mash **15 min** at **51C**
- Keep mash **45 min** at **68C**
- Sparge using **16.9 liter(s)** of **76C** water or to achieve **26.9 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Bohemian Pilsner Malt	3 kg (75%)	81 %	4
Grain	Weyermann - Vienna Malt	1 kg (25%)	81 %	8

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Premiant	20 g	60 min	9.9 %
Boil	Premiant	15 g	30 min	9.9 %
Boil	Saaz (Czech Republic)	35 g	15 min	4.38 %
Boil	Saaz (Czech Republic)	35 g	5 min	4.38 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM31 Bawarska Dolina	Lager	Slant	200 ml	Fermentum Mobile