

## #50 Pils

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **43**
- SRM **2.8**
- Style **Bohemian Pilsener**

### Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **4 %**
- Size with trub loss **26 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.8 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

### Steps

- Temp **64 C**, Time **20 min**
- Temp **72 C**, Time **50 min**
- Temp **76 C**, Time **1 min**

### Mash step by step

- Heat up **17.5 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **20 min** at **64C**
- Keep mash **50 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **18.3 liter(s)** of **76C** water or to achieve **30.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Malteurop Lager	4.5 kg (90%)	82 %	3
Grain	Weyermann - Carapils	0.5 kg (10%)	78 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	25 g	60 min	13.5 %
Boil	Lublin (Lubelski)	25 g	30 min	4 %
Boil	Lublin (Lubelski)	25 g	10 min	4 %
Boil	Lublin (Lubelski)	50 g	0 min	4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM30 Bohemska rapsodia	Lager	Liquid	200 ml	Fermentum Mobile