

## #31 Pils

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **18**
- SRM **3.6**
- Style **Bohemian Pilsener**

### Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **5 %**
- Size with trub loss **42 liter(s)**
- Boil time **90 min**
- Evaporation rate **8 %/h**
- Boil size **51.5 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **28.5 liter(s)**
- Total mash volume **38 liter(s)**

### Steps

- Temp **50 C**, Time **30 min**
- Temp **65 C**, Time **30 min**
- Temp **70 C**, Time **30 min**

### Mash step by step

- Heat up **28.5 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **30 min** at **50C**
- Keep mash **30 min** at **65C**
- Keep mash **30 min** at **70C**
- Sparge using **32.5 liter(s)** of **76C** water or to achieve **51.5 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński Fawcett	9 kg (94.7%)	81 %	4
Grain	Weyermann - Carapils	0.5 kg (5.3%)	78 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Saaz	55 g	60 min	4.5 %
Boil	Saaz (Czech Republic)	20 g	15 min	4.5 %
Boil	Saaz (Czech Republic)	25 g	5 min	4.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM30 Bohemska rapsodia	Lager	Liquid	40 ml	FM