

## Pils

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **34**
- SRM **3.8**
- Style **Bohemian Pilsener**

### Batch size

- Expected quantity of finished beer **45 liter(s)**
- Trub loss **5 %**
- Size with trub loss **48.1 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **60.5 liter(s)**

### Mash information

- Mash efficiency **80.585 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **31.1 liter(s)**
- Total mash volume **41.5 liter(s)**

### Steps

- Temp **50 C**, Time **30 min**
- Temp **64 C**, Time **30 min**
- Temp **70 C**, Time **30 min**
- Temp **77 C**, Time **0 min**

### Mash step by step

- Heat up **31.1 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **30 min** at **50C**
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **70C**
- Keep mash **0 min** at **77C**
- Sparge using **39.8 liter(s)** of **76C** water or to achieve **60.5 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pilsner Malt	9.89 kg (95.3%)	81 %	5
Grain	Weyermann - Carapils	0.49 kg (4.7%)	78 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Saaz (Czech Republic)	123.63 g	60 min	4.5 %
Boil	Saaz (Czech Republic)	37.09 g	15 min	4.5 %
Boil	Saaz (Czech Republic)	61.81 g	5 min	4.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Dry	28.43 g	Fermentis

### Extras

Type	Name	Amount	Use for	Time
Fining	Whirlflock T	3.09 g	Boil	10 min