

## Pils

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **44**
- SRM **4.5**
- Style **Bohemian Pilsener**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.6 liter(s)**
- Total mash volume **20.8 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**

### Mash step by step

- Heat up **15.6 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **14.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	4.5 kg (86.5%)	82 %	4
Grain	Viking Golden ale	0.3 kg (5.8%)	80 %	14
Grain	Strzegom Monachijski typ I	0.4 kg (7.7%)	79 %	16

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	30 g	60 min	11.8 %
Aroma (end of boil)	Hallertau Mittelfruh	100 g	5 min	3 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Dry	11.5 g	Fermentis

### Extras

Type	Name	Amount	Use for	Time
Water Agent	kwas fosforowy 85%	5 g	Mash	60 min
Fining	mech irlandzki	5 g	Boil	10 min