

## Pils

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **28**
- SRM **7**
- Style **Bohemian Pilsener**

### Batch size

- Expected quantity of finished beer **45 liter(s)**
- Trub loss **5 %**
- Size with trub loss **47.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **57 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **36 liter(s)**
- Total mash volume **48 liter(s)**

### Steps

- Temp **63 C**, Time **10 min**
- Temp **72 C**, Time **50 min**

### Mash step by step

- Heat up **36 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **10 min** at **63C**
- Keep mash **50 min** at **72C**
- Sparge using **33 liter(s)** of **76C** water or to achieve **57 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód PILZNEŃSKI Viking Malt	10 kg (83.3%)	80 %	4
Grain	Cookie	2 kg (16.7%)	72 %	50

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	30 g	60 min	11.5 %
Boil	Saaz (Czech Republic)	30 g	30 min	4.5 %
Boil	Saaz (Czech Republic)	60 g	15 min	4.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M84 Bohemian Lager	Lager	Dry	11 g	Mangrove Jack's

### Extras

Type	Name	Amount	Use for	Time
Fining	Mech	10 g	Boil	10 min