

## pils

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **40**
- SRM **3.6**
- Style **Bohemian Pilsener**

### Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **32.2 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

### Steps

- Temp **52 C**, Time **10 min**
- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **30 min**

### Mash step by step

- Heat up **18 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **63C**
- Keep mash **30 min** at **72C**
- Sparge using **20.2 liter(s)** of **76C** water or to achieve **32.2 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	BESTMALZ - Best Pilsen	5 kg (83.3%)	80.5 %	4
Grain	Słód pszeniczny Bestmalz	0.5 kg (8.3%)	82 %	5
Grain	płatki jęczmienne	0.5 kg (8.3%)	60 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	40 g	50 min	8.8 %
Aroma (end of boil)	Saaz (Czech Republic)	35 g	10 min	4.7 %
Aroma (end of boil)	Premiant	35 g	5 min	7.8 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M76 Bavarian Lager	Lager	Slant	350 ml	---

### Extras

Type	Name	Amount	Use for	Time
Fining	whirlfloc	1.25 g	Boil	10 min