

Pils

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **40**
- SRM **4.8**
- Style **Bohemian Pilsener**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **24.1 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.1 liter(s)**
- Total mash volume **22.8 liter(s)**

Steps

- Temp **63 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **17.1 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **60 min** at **63C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **12.7 liter(s)** of **76C** water or to achieve **24.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4 kg (70.2%)	80 %	4
Grain	Strzegom Pszeniczny	0.5 kg (8.8%)	81 %	6
Grain	Strzegom Monachijski typ I	0.5 kg (8.8%)	79 %	16
Grain	Weyermann - Carapils	0.2 kg (3.5%)	78 %	4
Grain	Viking Pale Ale malt	0.5 kg (8.8%)	80 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Saaz (Czech Republic)	20 g	60 min	4 %
Boil	Premiant	20 g	60 min	6.6 %
Boil	Saaz (Czech Republic)	25 g	15 min	4 %
Boil	Premiant	25 g	15 min	6.6 %
Boil	Saaz (Czech Republic)	25 g	2 min	4 %
Boil	Premiant	25 g	2 min	6.6 %

Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M84 Bohemian Lager	Lager	Dry	10 g	Mangrove Jack's