

PILS

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **24**
- SRM **4.6**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **27 liter(s)**
- Trub loss **5 %**
- Size with trub loss **28.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **34.2 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21.3 liter(s)**
- Total mash volume **27.4 liter(s)**

Steps

- Temp **65 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **21.3 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **45 min** at **65C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **19 liter(s)** of **76C** water or to achieve **34.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale/Pils Crisp	5 kg (82%)	81 %	5
Grain	Monachijski	1.1 kg (18%)	80 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	7.7 %
Boil	Saaz (Czech Republic)	15 g	20 min	4.5 %
Boil	Saaz (Czech Republic)	15 g	10 min	4.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Slant	250 ml	---