

Pils

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **24**
- SRM **4.5**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **22 liter(s)**
- Total mash volume **27.5 liter(s)**

Steps

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

Mash step by step

- Heat up **22 liter(s)** of strike water to **72.9C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **12.5 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4.5 kg (81.8%)	81 %	4
Grain	Monachijski	1 kg (18.2%)	80 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	15 g	60 min	10.5 %
Boil	Saaz (Czech Republic)	25 g	20 min	4.5 %
Boil	Saaz (Czech Republic)	25 g	5 min	4.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
w34/70	Lager	Dry	22 g	---