

ala warka

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **31**
- SRM **12.1**
- Style **Bohemian Pilsener**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.3 liter(s)**
- Total mash volume **20.4 liter(s)**

Steps

- Temp **64 C**, Time **15 min**
- Temp **72 C**, Time **45 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **15.3 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **15 min** at **64C**
- Keep mash **45 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **15.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3 kg (58.8%)	81 %	4
Grain	Strzegom Monachijski typ II	1 kg (19.6%)	79 %	22
Grain	Strzegom Wiedeński	1 kg (19.6%)	79 %	10
Grain	Carafa III	0.1 kg (2%)	70 %	1034

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	15 g	60 min	11 %
Boil	Marynka	15 g	25 min	10 %
Boil	Marynka	15 g	3 min	10 %