

## #103 Czwarte zwykłe piwo

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **35**
- SRM **4.3**
- Style **Bohemian Pilsener**

### Batch size

- Expected quantity of finished beer **22.6 liter(s)**
- Trub loss **6 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **6 %/h**
- Boil size **27 liter(s)**

### Mash information

- Mash efficiency **79 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

### Steps

- Temp **63 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **75.6 C**, Time **1 min**

### Mash step by step

- Heat up **15 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **20 min** at **63C**
- Keep mash **40 min** at **72C**
- Keep mash **1 min** at **75.6C**
- Sparge using **17 liter(s)** of **76C** water or to achieve **27 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (40%)	80 %	4
Grain	Viking Pilsner malt	2 kg (40%)	82 %	4
Grain	Viking Malt Monachijski jasny	1 kg (20%)	80 %	15

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Styrian Goldings SLO 2020 granulát	25 g	60 min	5.6 %
Boil	Styrian Goldings SLO 2020 granulát	25 g	30 min	5.6 %
Aroma (end of boil)	Styrian Goldings SLO 2020 granulát	50 g	10 min	5.6 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM42 Stare Nadreńskie	Ale	Slant	60 ml	Fermentum Mobile