

## #188 Trzynaste zwykłe piwo

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **36**
- SRM **4.3**
- Style **Bohemian Pilsener**

### Batch size

- Expected quantity of finished beer **20.3 liter(s)**
- Trub loss **7 %**
- Size with trub loss **21.7 liter(s)**
- Boil time **120 min**
- Evaporation rate **6 %/h**
- Boil size **24.8 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.15 liter(s) / kg**
- Mash size **14.5 liter(s)**
- Total mash volume **19.1 liter(s)**

### Steps

- Temp **52 C**, Time **5 min**
- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **1 min**

### Mash step by step

- Heat up **14.5 liter(s)** of strike water to **57.1C**
- Add grains
- Keep mash **5 min** at **52C**
- Keep mash **20 min** at **62C**
- Keep mash **40 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **14.9 liter(s)** of **76C** water or to achieve **24.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Malt pilzneński	3.9 kg (84.8%)	80 %	4
Grain	Viking Malt monachijski jasny	0.7 kg (15.2%)	79 %	15

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Žatecki CZ 2022	50 g	120 min	3.24 %
Boil	Žatecki CZ 2022	50 g	30 min	3.24 %
Aroma (end of boil)	Žatecki CZ 2022	50 g	1 min	3.24 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM704 Lutra kveik	Ale	Liquid	40 ml	Fermentum Mobile