

## #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 |