

## #145 Dziewiąte zwykłe piwo

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **34**
- SRM **4.1**
- Style **Bohemian Pilsener**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **6 %**
- Size with trub loss **21.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **6 %/h**
- Boil size **22.7 liter(s)**

### Mash information

- Mash efficiency **79 %**
- Liquor-to-grist ratio **3.33 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **18.2 liter(s)**

### Steps

- Temp **66 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **1 min**

### Mash step by step

- Heat up **14 liter(s)** of strike water to **72.9C**
- Add grains
- Keep mash **20 min** at **66C**
- Keep mash **40 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **12.9 liter(s)** of **76C** water or to achieve **22.7 liter(s)** of wort

### Fermentables

| Type  | Name                    | Amount         | Yield | EBC |
|-------|-------------------------|----------------|-------|-----|
| Grain | Viking Malt pilzneński  | 3.6 kg (85.7%) | 81 %  | 4   |
| Grain | Viking Malt monachijski | 0.6 kg (14.3%) | 80 %  | 16  |

### Hops

| Use for             | Name             | Amount | Time   | Alpha acid |
|---------------------|------------------|--------|--------|------------|
| Boil                | Marynka PL 2021  | 10 g   | 60 min | 8.6 %      |
| Boil                | Marynka PL 2021  | 30 g   | 30 min | 8.6 %      |
| Aroma (end of boil) | Lubelski PL 2021 | 25 g   | 1 min  | 3 %        |

### Yeasts

| Name                 | Type | Form   | Amount | Laboratory       |
|----------------------|------|--------|--------|------------------|
| FM52 Amerykański Sen | Ale  | Liquid | 30 ml  | Fermentum Mobile |