#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