

## PILS - XII 2022 r.

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- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **48**
- SRM **3.4**
- Style **Bohemian Pilsener**

### Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

### Steps

- Temp **64 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **1 min**

### Mash step by step

- Heat up **15 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **50 min** at **64C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **16.5 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	płatki ryżowe	0.5 kg (10%)	80 %	1
Grain	Strzegom Pilzneński	4.5 kg (90%)	80 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	30 g	60 min	11 %
Boil	lunga	30 g	10 min	11 %

### Yeasts

Name	Type	Form	Amount	Laboratory
S-189	Lager	Dry	23 g	Fermentis