

.PILS

- Gravity **12.6 BLG**
- ABV ---
- IBU **43**
- SRM **4**
- Style **Bohemian Pilsener**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **29.5 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.3 liter(s)**
- Total mash volume **20.4 liter(s)**

Steps

- Temp **52 C**, Time **15 min**
- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **15.3 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **15 min** at **52C**
- Keep mash **40 min** at **62C**
- Keep mash **60 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **19.3 liter(s)** of **76C** water or to achieve **29.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4.5 kg (88.2%)	80 %	4
Grain	Weyermann - Carapils	0.5 kg (9.8%)	78 %	4
Grain	zakwaszajacy	0.1 kg (2%)	1 %	0

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	10 %
Boil	Saaz (Czech Republic)	20 g	30 min	4.5 %
Boil	Saaz (Czech Republic)	20 g	15 min	4.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM30 Bohemska rapsodia	Lager	Liquid	150 ml	Fermentum Mobile