

## Pils

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- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **37**
- SRM **4.7**
- 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 **90 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.6 liter(s)**
- Total mash volume **25.2 liter(s)**

### Steps

- Temp **52 C**, Time **15 min**
- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **90 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **19.6 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **15 min** at **52C**
- Keep mash **40 min** at **62C**
- Keep mash **90 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **16.4 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Bohemian Pilsner Malt	5 kg (89.3%)	81 %	4
Grain	Weyermann - Carapils	0.5 kg (8.9%)	78 %	4
Grain	Strzegom Karmel 150	0.1 kg (1.8%)	75 %	150

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	25 g	60 min	11 %
Boil	Saaz (Czech Republic)	50 g	15 min	4.5 %
Boil	Saaz (Czech Republic)	25 g	0 min	4.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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FM30 Bohemska rapsodia	Lager	Liquid	100 ml	Fermentum Mobile
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### Extras

Type	Name	Amount	Use for	Time
Water Agent	Woda destylowana	10000 g	Mash	1 min
Fining	Mech irlandzki	5 g	Boil	15 min

### Notes

- Lagerowanie 0-4C 2 miesiące  
*Jan 5, 2019, 10:14 PM*