

## #31 Pils

- Gravity **13.1 BLG**
- ABV ---
- IBU **23**
- SRM **5.3**
- Style **Bohemian Pilsener**

### Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **6 %**
- Size with trub loss **42.4 liter(s)**
- Boil time **90 min**
- Evaporation rate **6 %/h**
- Boil size **50.1 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **30.9 liter(s)**
- Total mash volume **41.3 liter(s)**

### Steps

- Temp **50 C**, Time **30 min**
- Temp **65 C**, Time **30 min**
- Temp **70 C**, Time **30 min**

### Mash step by step

- Heat up **30.9 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **30 min** at **50C**
- Keep mash **30 min** at **65C**
- Keep mash **30 min** at **70C**
- Sparge using **29.5 liter(s)** of **76C** water or to achieve **50.1 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński soufflet	9.5 kg (92.1%)	81 %	4
Grain	Weyermann - Carapils	0.13 kg (1.3%)	78 %	4
Grain	Carahell	0.41 kg (4%)	77 %	26
Grain	Fawcett - Crystal	0.175 kg (1.7%)	70 %	160
Grain	Żytni	0.1 kg (1%)	85 %	8

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Saaz	50 g	75 min	3.4 %
Boil	Saaz (Czech Republic)	20 g	30 min	3.4 %
Boil	Saaz (Czech Republic)	30 g	25 min	3.4 %
Boil	Marynka	35 g	15 min	7.2 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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FM30 Bohemska rapsodia	Lager	Liquid	40 ml	FM
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