

## Pils

- Gravity **10 BLG**
- ABV ---
- IBU **26**
- SRM **3.6**
- Style **German Pilsner (Pils)**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **30.4 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

### Steps

- Temp **50 C**, Time **10 min**
- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **76 C**, Time **5 min**

### Mash step by step

- Heat up **13.5 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **10 min** at **50C**
- Keep mash **20 min** at **62C**
- Keep mash **40 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **21.4 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3.8 kg (84.4%)	81 %	4
Grain	Strzegom Monachijski typ I	0.5 kg (11.1%)	79 %	16
Grain	Weyermann - Carapils	0.2 kg (4.4%)	78 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	15 g	60 min	13.5 %
Boil	Styrian Golding	20 g	15 min	3.6 %
Aroma (end of boil)	Styrian Golding	6 g	10 min	3.6 %
Aroma (end of boil)	Styrian Golding	6 g	5 min	3.6 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM30 Bohemska rapsodia	Lager	Liquid	200 ml	Fermentum Mobile