

## Pils

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- Gravity **12.4 BLG**
- ABV ---
- IBU **23**
- SRM **4.7**
- Style **German Pilsner (Pils)**

### Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **5 %**
- Size with trub loss **42 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **50.6 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **31.5 liter(s)**
- Total mash volume **40.5 liter(s)**

### Steps

- Temp **63 C**, Time **60 min**

### Mash step by step

- Heat up **31.5 liter(s)** of strike water to **69.1C**
- Add grains
- Keep mash **60 min** at **63C**
- Sparge using **28.1 liter(s)** of **76C** water or to achieve **50.6 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	8 kg (88.9%)	80 %	4
Grain	Carahell	1 kg (11.1%)	77 %	26

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Saaz (Czech Republic)	50 g	60 min	4.5 %
Aroma (end of boil)	Saaz (Czech Republic)	50 g	15 min	4.5 %
Aroma (end of boil)	Saaz (Czech Republic)	50 g	5 min	4.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Dry	12 g	Fermentis