

## pils

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- Gravity **12.4 BLG**
- ABV ---
- IBU **36**
- SRM **5.8**
- Style **German Pilsner (Pils)**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

### Steps

- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **20 min**

### Mash step by step

- Heat up **15 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **20 min** at **72C**
- Sparge using **17.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzniejszy	4.5 kg (90%)	80 %	4
Grain	Strzegom Karmel 30	0.5 kg (10%)	75 %	30

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	25 g	60 min	10 %
Boil	Marynka	15 g	15 min	10 %
Boil	Lublin (Lubelski)	30 g	0 min	4 %
Dry Hop	Lublin (Lubelski)	30 g	3 day(s)	4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
blw35	Lager	Dry	9 g	---