

## Pils

- Gravity **9 BLG**
- ABV **3.5 %**
- IBU **47**
- SRM **3.3**
- Style **Bohemian Pilsener**

### Batch size

- Expected quantity of finished beer **5.2 liter(s)**
- Trub loss **5 %**
- Size with trub loss **5.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **25 %/h**
- Boil size **7.5 liter(s)**

### Mash information

- Mash efficiency **63 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **3.9 liter(s)**
- Total mash volume **5 liter(s)**

### Steps

- Temp **54 C**, Time **10 min**
- Temp **64 C**, Time **20 min**
- Temp **72 C**, Time **40 min**

### Mash step by step

- Heat up **3.9 liter(s)** of strike water to **58.8C**
- Add grains
- Keep mash **10 min** at **54C**
- Keep mash **20 min** at **64C**
- Keep mash **40 min** at **72C**
- Sparge using **4.7 liter(s)** of **76C** water or to achieve **7.5 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilsner (2 Row) Ger	1 kg (90.9%)	81 %	4
Grain	Weyermann - Carapils	0.1 kg (9.1%)	78 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	5 g	60 min	10 %
Boil	Marynka	5 g	30 min	10 %
Boil	Lublin (Lubelski)	5 g	15 min	4 %
Aroma (end of boil)	Lublin (Lubelski)	15 g	0 min	4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Saflager S-23	Lager	Dry	11 g	Fermentis

### Extras

Type	Name	Amount	Use for	Time
Fining	Whirlflock	0.8 g	Boil	10 min