

## Pils

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **29**
- SRM **3.7**

### Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **31.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **38 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **26.3 liter(s)**
- Total mash volume **33.8 liter(s)**

### Steps

- Temp **62 C**, Time **20 min**
- Temp **65 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **1 min**

### Mash step by step

- Heat up **26.3 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **20 min** at **62C**
- Keep mash **50 min** at **65C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **19.2 liter(s)** of **76C** water or to achieve **38 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	7.5 kg (100%)	82 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	25 g	60 min	9.1 %
Boil	Lublin (Lubelski)	20 g	30 min	5.4 %
Boil	Lublin (Lubelski)	35 g	15 min	5.4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
safale s-23	Lager	Dry	11.5 g	---

### Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	7 g	Boil	10 min