

Pils

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **38**
- SRM **3.5**

Batch size

- Expected quantity of finished beer **29 liter(s)**
- Trub loss **5 %**
- Size with trub loss **30.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **33.5 liter(s)**

Mash information

- Mash efficiency **83 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **26 liter(s)**

Steps

- Temp **64 C**, Time **15 min**
- Temp **72 C**, Time **60 min**

Mash step by step

- Heat up **19.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **15 min** at **64C**
- Keep mash **60 min** at **72C**
- Sparge using **20.5 liter(s)** of **76C** water or to achieve **33.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	6 kg (92.3%)	81 %	4
Grain	Płatki owsiane	0.5 kg (7.7%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Aroma (end of boil)	Lublin (Lubelski)	60 g	15 min	4 %
Boil	Marynka	30 g	60 min	10 %
Boil	Magnum	5 g	60 min	13.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Dry	23 g	Fermentis