

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **24**
- SRM **4.1**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.75 liter(s) / kg**
- Mash size **17.4 liter(s)**
- Total mash volume **22 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **79 C**, Time **5 min**

Mash step by step

- Heat up **17.4 liter(s)** of strike water to **69.9C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **79C**
- Sparge using **12.5 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	4.1 kg (88.5%)	82 %	4
Grain	Strzegom Monachijski typ I	0.533 kg (11.5%)	79 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Strisselspalt	50 g	60 min	2.4 %
Boil	Hallertau Tradition	50 g	10 min	5.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
Gozdawa - Czech Pilsner	Lager	Dry	11.5 g	Gozdawa