

take cos

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **26**
- SRM **6.6**
- Style **Classic American Pilsner**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.9 liter(s)**
- Total mash volume **17.2 liter(s)**

Steps

- Temp **68 C**, Time **55 min**
- Temp **72 C**, Time **5 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **12.9 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **55 min** at **68C**
- Keep mash **5 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **10.4 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	3 kg (69.8%)	82 %	4
Grain	Weyermann - Melanoiden Malt	0.5 kg (11.6%)	81 %	53
Grain	Pszeniczny	0.8 kg (18.6%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Zula	20 g	45 min	8.3 %
Boil	Izabella	15 g	15 min	5.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis