

Polskie Pale Ale

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **28**
- SRM **5.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **27.9 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.7 liter(s)**
- Total mash volume **19.6 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **14.7 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **18.1 liter(s)** of **76C** water or to achieve **27.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.5 kg (91.8%)	80 %	5
Grain	Caramunich® typ I	0.3 kg (6.1%)	73 %	80
Grain	Acid Malt	0.1 kg (2%)	58.7 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Puławski	25 g	60 min	8.9 %
Boil	Zula	15 g	20 min	7 %
Boil	Zula	15 g	0 min	7 %
Boil	Puławski	5 g	0 min	8.9 %
Dry Hop	Puławski	20 g	14 day(s)	8.9 %
Dry Hop	Zula	20 g	14 day(s)	7 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	10 g	Fermentis