

Polskie pale ale

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **36**
- SRM **4.4**
- Style **American Pale Ale**

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 **15 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.8 liter(s)**
- Total mash volume **18.4 liter(s)**

Steps

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

Mash step by step

- Heat up **13.8 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **16.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (87%)	80 %	5
Grain	Strzegom Monachijski typ I	0.2 kg (4.3%)	79 %	16
Grain	Płatki owsiane	0.3 kg (6.5%)	85 %	3
Grain	Carahell	0.1 kg (2.2%)	77 %	26

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	20 g	55 min	12.5 %
Boil	Sybilla	25 g	10 min	6.7 %
Aroma (end of boil)	Sybilla	25 g	0 min	6.7 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis