

polska apa

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **24**
- SRM **3.9**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.7 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **25 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **77 C**, Time **10 min**

Mash step by step

- Heat up **20 liter(s)** of strike water to **71.8C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **77C**
- Sparge using **12.7 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (100%)	80 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Puławski	10 g	60 min	8.9 %
Boil	Sybilla	30 g	30 min	4.9 %
Aroma (end of boil)	Sybilla	30 g	5 min	4.9 %
Dry Hop	Sybilla	40 g	3 day(s)	4.9 %

Yeasts

Name	Type	Form	Amount	Laboratory
wlp644	Ale	Slant	100 ml	white labs