

apale ale

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **34**
- SRM **6.9**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

Steps

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

Mash step by step

- Heat up **16.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **15.5 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (72.7%)	80 %	5
Grain	Pszeniczny	1 kg (18.2%)	85 %	4
Grain	Caramunich® typ I	0.5 kg (9.1%)	73 %	80

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	8.1 %
Boil	Lublin (Lubelski)	25 g	20 min	5.8 %
Whirlpool	Oktawia	100 g	---	7.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Dry	5.75 g	---