

# APA

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **45**
- SRM **3.9**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **1 min** at **78C**
- Sparge using **16.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.5 kg (90%)	80 %	5
Grain	Płatki pszeniczne	0.5 kg (10%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	15 g	60 min	12.9 %
Whirlpool	Citra	15 g	30 min	12.9 %
Whirlpool	Mosaic	15 g	30 min	12.5 %
Whirlpool	El Dorado	15 g	30 min	13.8 %
Dry Hop	Citra	20 g	1 day(s)	12.9 %
Dry Hop	El Dorado	35 g	1 day(s)	13.8 %
Dry Hop	Mosaic	35 g	1 day(s)	12.5 %

## Yeasts

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

## Notes

- Bardziej wytrawne i mniej chmielu na cichą

*Jun 2, 2020, 10:16 AM*