

# Apa ciasteczko

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- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **18**
- SRM **5.1**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **21 liter(s)**

## Steps

- Temp **65 C**, Time **120 min**

## Mash step by step

- Heat up **15.8 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **120 min** at **65C**
- Sparge using **21.2 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	5 kg (95.2%)	80 %	7
Grain	Cookie	0.25 kg (4.8%)	80 %	40

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	15 g	90 min	11.5 %
Dry Hop	Marynka	10 g	7 day(s)	8.7 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale