

# Earl grey APA

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **23**
- 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 **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.7 liter(s)**
- Total mash volume **18.2 liter(s)**

## Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **13.7 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **17.3 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale ale	3.65 kg (80.2%)	80 %	4
Grain	Płatki owsiane	0.55 kg (12.1%)	85 %	3
Grain	Monachijski	0.2 kg (4.4%)	80 %	16
Grain	Karmelowy Jasny 30EBC	0.15 kg (3.3%)	75 %	30

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mosaic	20 g	50 min	10 %
Boil	Cascade	18 g	10 min	4.6 %
Whirlpool	Simcoe	45 g	0 min	13.2 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Liquid	181.82 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Flavor	Earl grey	90 g	Secondary	1 day(s)

## Notes

- Fermentacja w 18 stopniach.  
Cicha 2x 10l
  1. Earl Grey 200% 50 g, + 50g Mosaic na 2 dni
  2. Earl Grey 150% 50 g, + 10g bergamotki + 50 g Mosaic

Wersja 2 intensywny dominujący aromat, nieco zbyt perfumowy. Docelowo zmniejszyć ilość bergamotki do 8g na 10 l  
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