

## #45 Earl Gray APA

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **35**
- SRM **7.1**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **80 %**
- 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 **50 min**
- Temp **78 C**, Time **1 min**

### Mash step by step

- Heat up **16.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **50 min** at **68C**
- Keep mash **1 min** at **78C**
- Sparge using **14.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	4.5 kg (81.8%)	79 %	6
Grain	Caramel/Crystal 50	0.3 kg (5.5%)	75 %	59
Grain	Karmelowy Czerwony	0.3 kg (5.5%)	75 %	59
Grain	Płatki owsiane	0.4 kg (7.3%)	60 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	10 g	60 min	15.8 %
Boil	Simcoe	15 g	30 min	12.6 %
Boil	Amarillo	12.5 g	5 min	8.5 %
Boil	Bramling Cross	7.5 g	5 min	6.1 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	300 ml	---

### Extras

Type	Name	Amount	Use for	Time
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Fining	whirlfloc	1 g	Boil	10 min
Water Agent	gips	6 g	Mash	0 min
Other	witamina C	4 g	Bottling	---
Spice	Trawa cytrynowa	15 g	Boil	10 min
Flavor	herbata Earl Gray	120 g	Secondary	2 day(s)