

APA earl Gray

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **23**
- SRM **5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.4 liter(s)**
- Boil time **65 min**
- Evaporation rate **5 %/h**
- Boil size **29.1 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.7 liter(s) / kg**
- Mash size **24.1 liter(s)**
- Total mash volume **30.6 liter(s)**

Steps

- Temp **65 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **24.1 liter(s)** of strike water to **71.1C**
- Add grains
- Keep mash **45 min** at **65C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **11.5 liter(s)** of **76C** water or to achieve **29.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	5 kg (76.9%)	80 %	7
Grain	Pilznieński	1 kg (15.4%)	81 %	4
Grain	Pszeniczny	0.5 kg (7.7%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	10 g	60 min	11 %
Boil	Mosaic	30 g	15 min	10 %
Whirlpool	Galaxy	15 g	0 min	15 %
Whirlpool	Nelson Sauvín	15 g	0 min	11 %
Whirlpool	Mosaic	20 g	0 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	22 g	Fermentis