

APA z trawą cytrynową i kafiorem

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **46**
- SRM **4.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.8 liter(s)**
- Total mash volume **22.4 liter(s)**

Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **16.8 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **16.6 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	BESTMALZ - Bestt Pale Ale	4.5 kg (80.4%)	80.5 %	6
Grain	Słód pszeniczny Bestmalz	1.1 kg (19.6%)	82 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mosaic	10 g	60 min	12.3 %
Boil	Citra	10 g	60 min	12.9 %
Boil	Mosaic	15 g	15 min	12.3 %
Boil	Citra	15 g	10 min	12.9 %
Boil	Mosaic	15 g	5 min	12.3 %
Boil	Citra	15 g	2 min	12.9 %
Aroma (end of boil)	Mosaic	10 g	0 min	10 %
Aroma (end of boil)	Citra	10 g	0 min	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
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Safale US-05	Ale	Slant	50 ml	---
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Extras

Type	Name	Amount	Use for	Time
Spice	Trawa cytrynowa	20 g	Boil	10 min
Spice	Kafir	20 g	Boil	10 min