

apa z trawa cytrynowa

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **40**
- SRM **4.2**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **26 liter(s)**

Steps

- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **19.5 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **16 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	2 kg (30.8%)	80 %	4
Grain	Viking Pale Ale malt	3 kg (46.2%)	80 %	5
Grain	Płatki owsiane	0.5 kg (7.7%)	85 %	3
Grain	Pszeniczny	1 kg (15.4%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	10 %
Boil	Lublin (Lubelski)	30 g	30 min	4 %
Boil	Cascade PL	30 g	5 min	5.2 %
Boil	Lublin (Lubelski)	30 g	5 min	4 %
Dry Hop	Cascade PL	20 g	5 day(s)	5.2 %

Yeasts

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

Extras

Type	Name	Amount	Use for	Time
Spice	trawa cytrynowa	20 g	Boil	15 min