

Pale Ale z trawą cytrynową

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **26**
- SRM **4.5**
- 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 **75 min**
- Evaporation rate **10 %/h**
- Boil size **27 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **65C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **17 liter(s)** of **76C** water or to achieve **27 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.5 kg (50%)	80 %	5
Grain	Strzegom Monachijski typ I	1 kg (20%)	79 %	12
Grain	Strzegom Pilzneński	1 kg (20%)	80 %	4
Grain	Pszeniczny	0.5 kg (10%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	19 g	60 min	12.7 %

Yeasts

Name	Type	Form	Amount	Laboratory
u-04	Ale	Dry	11.5 g	---

Extras

Type	Name	Amount	Use for	Time
Flavor	trawa cytrynowa	25 g	Boil	5 min