

# Single Hop lunga z trawą cytrynową

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **47**
- SRM **5.2**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **4 %**
- Size with trub loss **13 liter(s)**
- Boil time **70 min**
- Evaporation rate **20 %/h**
- Boil size **16.4 liter(s)**

## Mash information

- Mash efficiency **79 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **9.2 liter(s)**
- Total mash volume **11.8 liter(s)**

## Steps

- Temp **66 C**, Time **40 min**
- Temp **72 C**, Time **40 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **9.2 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **40 min** at **66C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **9.8 liter(s)** of **76C** water or to achieve **16.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	1.5 kg (57.1%)	79 %	6
Grain	Strzegom Wiedeński	1 kg (38.1%)	79 %	10
Grain	Carahell	0.125 kg (4.8%)	77 %	26

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	20 g	30 min	9.5 %
Boil	lunga	20 g	15 min	9.5 %
Aroma (end of boil)	lunga	20 g	0 min	9.5 %
Dry Hop	lunga	40 g	3 day(s)	9.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	5 g	Safale

## Extras

Type	Name	Amount	Use for	Time
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Water Agent	gips piwowarski	2 g	Mash	60 min
Flavor	Trawa cytrynowa	10 g	Boil	5 min