Polish Pale Ale -ciasteczkowa Marynka

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **30**
- SRM **4.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **27 liter(s)**
- Trub loss **5 %**
- Size with trub loss **28.4 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **34.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **27 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **10 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **72C**
- Sparge using **19.7 liter(s)** of **76C** water or to achieve **34.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	5 kg *(83.3%)*	82 %	4
Grain	viking malt cookies	0.5 kg *(8.3%)*	72 %	40
Grain	Strzegom Wiedeński	0.5 kg *(8.3%)*	79 %	10

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	40 g	40 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	20 g	Fermentis