

# Grzeński PPA

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **20**
- SRM **4.7**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **27.4 liter(s)**

## Mash information

- Mash efficiency **68 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.9 liter(s)**
- Total mash volume **25.6 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **45 min**

## Mash step by step

- Heat up **19.9 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **45 min** at **72C**
- Sparge using **13.2 liter(s)** of **76C** water or to achieve **27.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (52.6%)	80 %	5
Grain	Weyermann - Carapils	1 kg (17.5%)	78 %	4
Grain	Strzegom Wiedeński	1 kg (17.5%)	79 %	10
Grain	Strzegom Pszeniczny	0.5 kg (8.8%)	81 %	6
Grain	Płatki owsiane	0.2 kg (3.5%)	60 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Sybilla	15 g	60 min	3.5 %
Whirlpool	Marynka	75 g	10 min	10 %
Dry Hop	Marynka	35 g	21 day(s)	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis