

# PIPA@2

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **58**
- SRM **6.9**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **50 liter(s)**
- Trub loss **5 %**
- Size with trub loss **55 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **64.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **36.8 liter(s)**
- Total mash volume **49 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **76 C**, Time **15 min**

## Mash step by step

- Heat up **36.8 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **15 min** at **76C**
- Sparge using **40.3 liter(s)** of **76C** water or to achieve **64.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	5 kg (40.8%)	80 %	4
Grain	Strzegom Wiedeński	5 kg (40.8%)	79 %	10
Grain	Strzegom Monachijski typ I	2 kg (16.3%)	79 %	16
Grain	Caramel/Crystal Malt - 120L	0.25 kg (2%)	72 %	236

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	70 g	45 min	13 %
Boil	Chinook	30 g	30 min	13 %
Boil	Cascade PL	20 g	15 min	5.2 %
Boil	Puławski	20 g	15 min	4.3 %
Boil	Cascade PL	20 g	5 min	5.2 %
Boil	Puławski	20 g	5 min	4.3 %
Aroma (end of boil)	Cascade PL	20 g	10 min	5.2 %
Aroma (end of boil)	Puławski	20 g	10 min	4.3 %
Dry Hop	Puławski	40 g	10 day(s)	4.3 %
Dry Hop	Cascade PL	40 g	10 day(s)	5.2 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	23 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Spice	trawa cytrynowa	20 g	Boil	10 min