

PPA

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **41**
- SRM **5.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **5 %**
- Size with trub loss **17.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **21.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.9 liter(s)**
- Total mash volume **24.3 liter(s)**

Steps

- Temp **68 C**, Time **90 min**
- Temp **75 C**, Time **15 min**

Mash step by step

- Heat up **18.9 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **90 min** at **68C**
- Keep mash **15 min** at **75C**
- Sparge using **8.1 liter(s)** of **76C** water or to achieve **21.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	5 kg (92.6%)	80 %	4
Grain	Caraamber	0.2 kg (3.7%)	75 %	59
Grain	Płatki pszeniczne	0.2 kg (3.7%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	20 g	45 min	11 %
Boil	Oktawia	20 g	20 min	7.1 %
Boil	Sybilla	20 g	10 min	3.5 %
Boil	lunga	10 g	5 min	11 %
Boil	Oktawia	10 g	5 min	7.1 %
Boil	Sybilla	10 g	5 min	3.5 %
Dry Hop	lunga	20 g	5 day(s)	11 %
Dry Hop	Oktawia	20 g	5 day(s)	7.1 %
Dry Hop	Sybilla	20 g	5 day(s)	3.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
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mangrove jack's m36	Ale	Dry	11.5 g	---
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Extras

Type	Name	Amount	Use for	Time
Water Agent	Chlorek Wapnia	6 g	Mash	90 min
Water Agent	Gips Piwowarski	4 g	Mash	90 min