

# liofilizowana APA

- Gravity **13.6 BLG**
- ABV ---
- IBU **27**
- SRM **6.2**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

## Steps

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

## Mash step by step

- Heat up **15 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **15.5 liter(s)** of **76C** water or to achieve **25.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	4.5 kg (90%)	80 %	7
Grain	Pszeniczny	0.5 kg (10%)	85 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	30 min	10.5 %
Boil	Marynka	10 g	10 min	10 %
Boil	Mosaic	10 g	10 min	10 %
Boil	Marynka	20 g	0 min	10 %
Boil	Mosaic	20 g	0 min	10 %
Dry Hop	Mosaic	70 g	5 day(s)	10 %

## Yeasts

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

## Extras

Type	Name	Amount	Use for	Time
Spice	liofilizowana skórka limonki	10 g	Boil	8 min

Spice	liofilizowana skórka pomarańczy	10 g	Boil	8 min
Spice	liofilizowana skórka limonki	10 g	Boil	8 min