

# Biała plama

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **33**
- SRM **3.6**
- Style **White IPA**

## Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.1 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.9 liter(s)**
- Total mash volume **25.2 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **66 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **18.9 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **60 min** at **66C**
- Keep mash **5 min** at **76C**
- Sparge using **18.5 liter(s)** of **76C** water or to achieve **31.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4 kg (63.5%)	80 %	4
Grain	Pszeniczny	1 kg (15.9%)	85 %	4
Grain	Briess - 2 Row Carapils Malt	0.3 kg (4.8%)	75 %	3
Grain	Płatki pszeniczne	0.5 kg (7.9%)	85 %	3
Grain	Płatki owsiane	0.5 kg (7.9%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	20 g	30 min	13 %
Aroma (end of boil)	Mosaic	30 g	20 min	10 %
Whirlpool	Mosaic	20 g	0 min	10 %
przetrzymanie 20 min przed chłodzeniem				
Whirlpool	Citra	20 g	0 min	13.7 %
przetrzymanie 20 min przed chłodzeniem				
Dry Hop	Citra	30 g	3 day(s)	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safbrew S-33	Ale	Dry	11.5 g	Safbrew

### Extras

Type	Name	Amount	Use for	Time
Herb	kolendra	15 g	Boil	15 min
Flavor	skórka pomarańczy	10 g	Boil	15 min
Flavor	curacao	5 g	Boil	15 min
Flavor	trawa cytrynowa	5 g	Boil	5 min