

# Biała dama

- Gravity **10.2 BLG**
- ABV **4.1 %**
- IBU **28**
- SRM **3.1**
- Style **White IPA**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.9 liter(s) / kg**
- Mash size **11.7 liter(s)**
- Total mash volume **14.7 liter(s)**

## Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **11.7 liter(s)** of strike water to **69.6C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **20.3 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód Pilsneński Viking Malt Strzegom 3-4,5 EBC	1.5 kg (33.3%)	80 %	4
Grain	Słód PSZENICZNY Viking Malt	1.5 kg (33.3%)	82 %	5
Adjunct	Płatki pszeniczne	1 kg (22.2%)	60 %	3
Adjunct	Płatki owsiane	0.5 kg (11.1%)	60 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	East Kent Goldings 2020	21 g	60 min	6.3 %
Aroma (end of boil)	Amarillo USA	15 g	10 min	9.5 %
Aroma (end of boil)	Equinox	17 g	10 min	13.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Drożdże Lallemand Danstar Nottingham 11 g	Ale	Slant	300 ml	---

## Extras

Type	Name	Amount	Use for	Time
Spice	quracao	35 g	Boil	15 min
Spice	kolendra	10 g	Boil	15 min