

## Biała dama v.2

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- Gravity **10.5 BLG**
- ABV **4.2 %**
- IBU **30**
- SRM **3.8**
- Style **American Wheat or Rye Beer**

### 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 **3.5 liter(s) / kg**
- Mash size **14.7 liter(s)**
- Total mash volume **18.9 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 **14.7 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **18.5 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	2 kg (42.5%)	80 %	4
Grain	Słód PSZENICZNY Viking Malt	1.97 kg (41.8%)	82 %	5
Grain	Słód Cookie Viking Malt 1kg śrutowany	0.12 kg (2.5%)	--- %	40
Adjunct	Płatki owsiane	0.5 kg (10.6%)	60 %	3
Grain	Słód MONACHIJSKI typ I 16 EBC Crisp	0.12 kg (2.5%)	82 %	16

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	13 g	60 min	12 %
Aroma (end of boil)	Amarillo USA	15 g	10 min	9.5 %
Aroma (end of boil)	Simcoe	17 g	5 min	12 %
Aroma (end of boil)	Chinok pl	15 g	10 min	7.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Drożdże Lallemmand Danstar Nottingham 11 g	Ale	Slant	100 ml	---
Gozdawa - BW11 Bavarian Wheat	Ale	Slant	150 ml	---

### Extras

Type	Name	Amount	Use for	Time
Spice	quracao	35 g	Boil	15 min
Spice	kolendra	10 g	Boil	15 min
Spice	skórka z pomarańczy	5 g	Boil	15 min