

## Biała Podlaska #2 - Witbier - Browar na Wyżynie

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **17**
- SRM **3.9**
- Style **Witbier**

### Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **6 %**
- Size with trub loss **20.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.3 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

### Steps

- Temp **55 C**, Time **15 min**
- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **16.5 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **15 min** at **55C**
- Keep mash **60 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **11.3 liter(s)** of **76C** water or to achieve **22.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	pilznieński Viking Malt	2.5 kg (45.5%)	80 %	5
Grain	pszeniczny Viking Malt	0.5 kg (9.1%)	81 %	5
Grain	płatki pszenne błyskawiczne	1.8 kg (32.7%)	50 %	1
Grain	płatki owsiane błyskawiczne	0.5 kg (9.1%)	50 %	3
Grain	mąka pszenna	0.2 kg (3.6%)	50 %	---

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Junga (PL) - granulát	8 g	60 min	12.5 %
Boil	Saaz (CZ) - granulát	20 g	15 min	3.78 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safbrew T-58	Ale	Slant	300 ml	---

## Extras

Type	Name	Amount	Use for	Time
Flavor	Skórka pomarańczy	100 g	Boil	5 min
Spice	Kolendra	10 g	Boil	5 min
Herb	Rumianek saszetka x 2	3 g	Boil	5 min
Water Agent	kwas mlekowy	4 g	Mash	110 min
Water Agent	chlorek sodu	3 g	Mash	110 min
Water Agent	siarczan wapnia	1 g	Mash	110 min
Water Agent	woda demineralizowana	15000 g	Mash	110 min
Spice	curacao	20 g	Boil	5 min

## Notes

- Profil wody:  
Ca+2 Mg+2 Na+ Cl- SO4-2 Alkalinity Residual  
68.2 10.0 44.4 71.4 42.6 109.9 55.4

SO42-/Cl- ratio: 0.6 Very Malty  
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